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MIND AND CONDUCT

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MORSE LECTURES DELIVERED AT THE
UNION THEOLOGICAL SEMINARY IN 1919

BY

HENRY RUTGERS MARSHALL, L.H.D., D.S.

AUTHOR OF
"PAIN, PLEASURE AND ÆSTHETICS," "INSTINCT AND REASON"
"CONSCIOUSNESS," ETC.

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TO

CHRISTOPHER MINOT WELD

PREFACE

It has of late occurred to me that it might be well to group together in a single volume the discussion of certain problems relating to human conduct to which my thought has been turned in the course of my psychological studies. The opportunity to carry this project into execution came when I received from the trustees of the Union Theological Seminary of New York the appreciated request to deliver the Morse Lectures at that institution in 1919. I am, however, not giving in this book a mere transcript of these lectures, although their substance is contained in it. I have included not a little that seemed germane to the subjects considered, which I found it necessary to omit in the brief time then at my disposal, or which did not appear appropriate to bring before a general audience. Nor is the matter wholly a restatement of views already published. A number of the arguments presented have not thus far appeared in print, although most of them have found their place in philosophical or psychological journals, or in my previously issued books, to which I have referred the reader where it has seemed desirable to eliminate polemical discussions, and at the same time to avoid the appearance of the assumption of a dogmatic attitude.

I am indebted to the editors of the *Philosophical Review*, and of the *Journal of Philosophy*, for permission to reprint parts of articles that have already appeared in their columns, and especially to President Arthur C. McGiffert, for having read the book in manuscript, and for the helpful criticism and suggestions he has made. It must not be assumed, however, that he subscribes to all of the views I have presented.

HENRY RUTGERS MARSHALL.

February, 1919.

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PART I

THE CORRELATION OF MIND AND CONDUCT

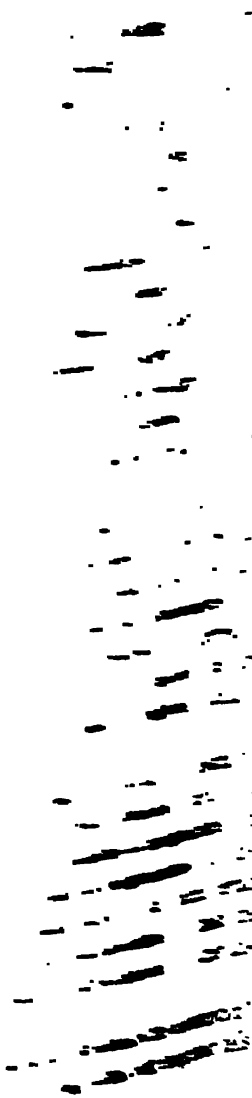
CHAPTER I

CONSCIOUSNESS AND BEHAVIOR

I

SEC. 1. In every-day life we are concerned almost altogether with the consideration of what we, when we become sophisticated, call objects in the outer world: beds, baths, breakfasts, letters, writing-tables, ink-bottles, etc., etc. Changes in these objects under changed conditions are properly spoken of as their behavior. Common usage, however, warrants us in limiting the application of the term behavior, as I shall in general do, to changes in the activities of living animals. As men are animals, and as their influence is most significant in our lives, their behavior is more frequently noted than that of other animals, and will be our special subject of consideration.

Each human individual realizes that he is himself a man-animal, and each of us observes his own behavior more constantly and more carefully than that of other animals. He soon comes to distinguish two forms of his own behavior, which when he learns to think clearly he notes are in the one case immediate, or non-hesitant, (as, for instance, our reflex acts), and in the other case are hesitant or deliberate, as we say. He, however, makes the distinction referred to long before he notes the difference between the hesitant and the non-hesitant forms, because in connection with the hesitant or deliberate behavior he notes changes in what he calls his consciousness, while in connection with the non-hesitant



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their speech; in this acknowledging the fact
tation.

SEC. 3. The "common man" generally h
that we have a mysterious direct knowledge of
minds, although the most cursory study of the

behavior he notes no such changes. This observation in itself leads us quite naturally, I think, to look upon consciousness as something that is closely related with our behavior, yet in a way detached from it.

But we go beyond that. In observing the behavior of other men-animals we note activities of these same two types, the non-hesitant and the hesitant; but here we note no changes in consciousness in either case. The kind of behavior that is always conscious behavior when noticed in myself is witnessed in my neighbor without any consciousness accompaniment whatever. Thus I observe myself running away from a sudden danger and feel fear; where the danger applies to my neighbor, but not to me, I observe his flight as I observe my own, but I feel no fear.

Notwithstanding this obvious fact we have no hesitation in assuming that the behavior of other men that is similar to our own behavior which has a consciousness accompaniment has for them also a consciousness accompaniment, even though we ourselves do not appreciate it. I do not hesitate to say that my neighbor was afraid when he fled in a panic, although I observed nothing but his flight, and no fear at all.

Evidently we are dealing here with an assumption. We assume that certain forms of behavior, which in our own cases involve a consciousness accompaniment, involve the same consciousness accompaniment for other men who behave in the same way. And within certain very arbitrary limits we are accustomed to make the same assumption in regard to the behavior of other animals than men.

SEC. 2. On what grounds do we make this assumption? The average man is likely to say that our neighbor tells

us that he has this consciousness accompaniment of the behavior we refer to. But evidently we make the assumption whether he tells us of it or not. We assume his fear when he flees, even if he does not tell us of it, and would believe him to be lying if he denied having been afraid. Moreover we are quite as ready to ascribe fear to the dog that runs away from attack as we are to the fleeing man, and the dog cannot tell us of his fear: we assume it because of his behavior.

This leads us to note that speech is itself a form of behavior, the nature of which is indicated to us, not through sight indeed, but through an equally reliable sense, viz., that of hearing. Whether I see a man shake his head in dissent from what I am saying, or hear him say, "No, no," I do not myself appreciate the conscious state which I describe as dissent; but in the one case as in the other I interpret the head-movement behavior noted through the eye, and the throat-movement behavior noted through the ear. In both cases I make the same assumption that behavior which, when it occurs in me, is accompanied by a specific conscious state, is accompanied by a similar conscious state when it occurs in him.

Further evidence that we are here dealing altogether with an interpretation, based upon an assumption, is given in the fact that we not infrequently attribute to other men states of consciousness which they tell us they did not experience. We then are likely to say that we misinterpreted their gesture behavior, or the purport of their speech; in this acknowledging the fact of interpretation.

SEC. 3. The "common man" generally holds tacitly that we have a mysterious direct knowledge of other men's minds, although the most cursory study of the facts brings

to light certain perfectly obvious objections to such a view. For instance, we attribute consciousness not only to man, but also to some animals. Is this attribution based upon the same unassailable intuition? If it is, why is it that we are so uncertain in making this attribution to animals? Why do we unhesitatingly agree that the dog and the horse have consciousness, but find it difficult to agree as to its existence, or non-existence, in connection with the life of the ant and of the bee? Is it not evident that in the case of the animal world we are dealing with modes of interpretation based upon data that are at times equivocal?

The data we employ in the case of animals are very evidently found in their behavior. Is it not clear that we also attribute minds to other men as the result of a similar interpretation? And if this is true, why should we assume that we have a very special intuitive knowledge, transcendent of experience, which leads us to attribute consciousness to other human beings than ourselves?

Notwithstanding all this, even careful thinkers find it difficult to abandon this view.* In support of such a position, our attention is often nowadays called to the fact that the clear appreciation by the adult of his own Self is bound up with his recognition of other Selves; and we are thus led to infer that our knowledge of other minds is of the same type as our knowledge of our own. But in this the issue is surely clouded. The notion of my "Self" is, as we shall see later, a highly complex conception developed from simpler conscious experiences that are themselves differentiated from behavior. It is true that the clear notion of my own Self is that of an indi-

* *Cf.*, for instance, Dr. John Laird's *Problems of the Self*, p. 27 *f.*, published in 1917.

vidual in a group, and that the other members of the group are appreciated to be other Selves; but that merely throws us back to our original question, viz., How do we come to believe that other individual men have consciousnesses, and the Selves that develop therein? In the very beginning of social relations each individual must have found implicit in his experience the distinction between the observed behavior of his own body *with* its added consciousness attribute, and the observed like behavior of other men *without* this added consciousness attribute; and it is evident that if, as is claimed, a process of interpretation is explicit when we think clearly of the behavior and of the consciousness of other men, it probably, to say the least, has been implicit from the very beginning. The problem is thus merely thrown back in time.

SEC. 4. We are led then to ask what basis we have, if any, for the assumption we are considering. It seems to me that we have a very firm one in the very nature of consciousness as it is divulged to us as the result of our modern careful psychological studies. These have taught us that when two characteristics of a frequently observed object are separable they become so connected by association, as we call it, that when one of the characteristics is given in a newer object, the other of the two characteristics of the frequently observed object is likely to be reinstated as an image, and is thus naturally looked upon as an attribute of the newer object later observed. Furthermore, the characteristics of the more frequently observed one of the two objects are the ones that are most likely to be attributed to the less frequently observed, but similar, of the two objects. Thus, for example, we see a carefully shaded, round piece of yellow paper, and at once

think: "How exactly it looks like an orange!" But were round, shaded pieces of yellow paper more common in our experience than oranges, we should say, when we saw an orange: "How much it looks like a shaded, round piece of yellow paper!"

In the very earliest observations of babyhood, the behavior of the baby's own body, and of other persons' bodies, will naturally group themselves together. The baby's own hand movement, for instance, and the hand movements of the mother and nurse will appear to the baby to be all of a kind. Now, the baby's own behavior, say its hand movements, is more constantly brought to its attention than the like behavior—again say the hand movements—of mother and nurse. Presently it finds that in connection with its own frequently observed hand movements it experiences a conscious attribute. Hence, when the baby next notes the hand movements of mother or nurse, the consciousness characteristic, often observed in connection with its own most familiar hand movements, is reinstated as an image, and is attached by mere association to the less often and less closely observed hand movements of mother or nurse.

The process thus described in terms of hand movements would apply to all the growing child's observation of behavior, and thus from the very beginnings of its life there would be established the habit of interpretation of the behavior of other persons in terms of consciousness. Indeed, this habit would naturally tend to extend itself to all behavior of outer-world objects; and thus it is that we often find the young child attributing a conscious life to inanimate objects; a manner of thought that in fact persists to a wide extent in adult life among childlike savages. But the experience of life must soon lead the child

to the discrimination of animate from inanimate objects; and as this experience is extended he must find the interpretation referred to so effective in relation to the animate and so ineffective in relation to the inanimate that he will soon come to limit his interpretations in the main to apply to animate life. And this manner of thought will be fostered as the child grows older by his appreciation of the fact that his conduct based upon this mode of interpretation is found to yield practical and desired results. We shall see later that there is a certain view in accord with which the attribution of consciousness to inanimate nature is justified.

It would thus appear that the attribution of a consciousness characteristic to other men in connection with their behavior is not due to any knowledge that transcends experience, but is due to a quite natural interpretation of the part of that experience which relates to the behavior of others, in terms of the much more frequently observed part of that experience which relates to ourselves.

II

SEC. 5. We are thus dealing with a dichotomy within experience. The distinction between behavior and consciousness, based as it is upon the distinction between our observed behavior with, and that without, a recognizable consciousness attribute, must be apprehended very early in life as the result of the dim appreciation of the fact that only some of the child's own movements are connected with noticeable changes in the consciousness attribute. Upon the same experience is based our commonplace distinction between mind and conduct.

This dichotomy is accepted by each man in every-day life without attempt to account for this division within experience, and we shall thus accept it in this work,* noting that in making this distinction we agree that consciousness and behavior are two diverse and distinct existences, and that they are in some manner related. We shall inquire as to the significance of this relation in certain directions.

SEC. 6. At the start it may be noted that we may consider animal behavior in general, of which human behavior is a particular case, in itself, without any reference to the relation between it and consciousness. In so doing we have developed a special science called biology. On the other hand, we may study the nature of human consciousness in itself, without any reference to the relation between it and behavior. In so doing we have developed a special science called psychology.

The recognition of the fact that there is some correlation between consciousness and behavior leads us to see that the study of behavior is of value to the psychologist in comprehending the nature of consciousness, and that the study of psychology is of value to the biologist in comprehending the aspects of biology that we call behavior. This is apparent as soon as we consider how much we depend in every-day life upon the recognition of this correlation. It is difficult to picture what our life would be if we did not constantly judge of a man's sentiments and thoughts by his behavior; or if, on the other hand, we did not constantly judge of our fellow's probable behavior by what we come to know of his conscious states as he indicates them to us in his conversation. The lawyer with full assurance points to a criminal's

* *Cf.* Appendix II.

behavior under certain conditions as proof of his conscious intent. The physician, on the other hand, looks without hesitancy upon the mental state of his patient as indicative of the behavior of his physical organism.

It would appear to all of us manifestly absurd were some psychologist to tell us that the study of the relation of behavior to consciousness was of no value to him in his work, and especially absurd for him to hold that all biological study of behavior in itself is useless. It is clearly equally absurd for a student of biology to tell us that the study of the relation of consciousness to behavior is of no value to him, and especially absurd for him to hold that all study of consciousness in itself is useless! Yet this latter position is taken by not a few able men among the so-called "behaviorists," and this in the face of the fact that we can scarcely hope to state in terms of behavior certain mental states that have much to do with human conduct; for instance, the state we describe as belief.

SEC. 7. We begin, then, with the acceptance of the fact that a man's consciousness and his bodily behavior are closely related. We find that certain specific forms of consciousness always *go with* certain specific forms of behavior, and *vice versa*. Darwin, and James, and of late Cannon, have shown us, for instance, how invariably certain forms of bodily reaction accompany an emotion. We cannot be angry if we restrict certain bodily reactions; if, for example, we fold our hands and smile. On the other hand, one cannot clinch his teeth, close his fists and strike violently, without finding in his conscious experience all the main characteristics of anger.

Again we note certain forms of consciousness that invariably *follow* certain forms of behavior, and *vice versa*.

Certain kinds of abnormal behavior in the digestive system are followed by that conscious experience which we describe as "depression of spirits." Certain conscious experiences which we call "acts of will" are followed by distinct types of behavior, in the arms or legs, for instance.

The facts last referred to lead men generally to hold that the relation between behavior and conduct is the relation of cause to effect. We seem to observe cases where the behavior causes the mental state, and other cases where the mental states cause the behavior; but the average man treats the relation as a purely haphazard one. He thinks of behavior as at times caused by mental states (*e. g.*, in voluntary action), and at other times as not so caused (*e. g.*, in reflex action). So he thinks of mental states as at times caused by modes of behavior (*e. g.*, depression of spirits is said to be due to illness), and at other times as not so caused (*e. g.*, reasoning is not looked upon as due to physical causes). But it does not occur to him to ask why this relation applies in some cases and not in others. Evidently such a position must be most unsatisfactory to the careful thinker. This situation has led certain students to advance the theory that mental states are always caused by forms of neural behavior in the brain. Against this position others maintain that while most of our behavior is quite mechanical, one form of behavior causing another form of behavior; nevertheless some forms of consciousness, the will act, for instance, cause behavior.

The difficulties connected with the acceptance of either of these views are marked, and are considered at length in Appendix I. It is to be noted, however, that for our purposes it is not essential to take a definite stand in relation to this controversy; all that we find necessary is the

agreement that there is a large measure of *correspondence* between specific states of consciousness and specific forms of behavior, this holding true whether the correspondence be a matter of priority in one or the other of the two terms, as is implied in the common notion of cause and effect, or whether it be a matter of simultaneous occurrence. In either case we are able to judge of the nature of a form of behavior by study of the corresponding conscious state, and of the nature of a state of consciousness by study of the corresponding behavior. The difference lies merely in this: that if we think of the correspondence as simultaneous in time, and not necessarily involving the causal relation, we treat the behavior as *symptomatic* of the conscious state, and the conscious state as *symptomatic* of the form of behavior. Thus, without dependence upon the conception of causality, the lawyer is able to judge of a man's conscious intention by his behavior, and, on the other hand, the physician is justified in judging of the nature of his patient's organic behavior by reference to what he comes to know of his patient's thoughts and "feelings."

SEC. 8. Let us now consider certain facts that indicate the fulness of this correlation between animal behavior and consciousness.

It is well recognized that retentiveness is a physiological as well as a psychological fact. On the one hand, each behavior reaction to a given stimulus results in a modification of the behavior reaction that will follow a further stimulation of the same kind. And on the other hand, each experience in consciousness, correlated with a given behavior reaction, results in a modification of the conscious experience that is correlated with a further behavior reaction of the same kind. These changes are usu-

ally so slight that they pass unnoticed; but where they are cumulative they appear clear, in the one case in connection with the changes in behavior which we describe as the acquisition of habits, and in the other case in the changes in consciousness which we describe as gain in familiarity. Of these two correspondents we shall have frequent occasion to speak in what follows.

SEC. 9. When we study any particular instance of behavior we discover that it involves both a stimulation and a reaction. At times we overlook the stimulation and notice only the reaction, and at other times we overlook the reaction, noting only the stimulation; but close study convinces us that the two are always found together. So in our conscious life each experience involves some degree of cognition, closely related to stimulation from the environment; and some degree of conation, closely related to reaction upon the environment. Here, again, we at times overlook the cognitive aspect of the experience, and come to look upon the experience as altogether a state of will; and at other times we overlook the conative aspect of the experience, and come to look upon the experience as altogether a state of knowledge; but close study convinces us that the two are always found together. It is one of the services of the modern pragmatists and instrumentalists that they have forced upon us the recognition of the fact that each cognition involves a conative movement beyond itself.

SEC. 10. In all elemental behavior we find differentiations due to the degree of the stimulation; and correspondingly with these we find in elemental conscious states what we call differences of intensity.

In all elemental behavior there evidently must be found differentiations dependent upon the relation of the stimu-

lus to the capacity for reaction in the element. The element must be either exceptionally well nourished, and will then react to the stimulus with marked efficiency; or ill nourished, and will then react inefficiently; or its nutritive condition may be such that there is an equivalence between the energy involved in the stimulus and that involved in the reaction. So in our conscious life, we find, as I shall indicate in more detail in Chapter VI, that pleasure is given in connection with hyperefficient elemental behavior; pain in connection with inefficient elemental behavior, and what we call indifference in connection with the equivalence of stimulus to reaction above referred to.

In higher organisms each act of behavior involves the reactions of many minor systems within the major system taken as a whole, and the reactions of many elements within these minor systems; instances of behavior will always display some measure of complexity. So we, who are highly complex animals, find in each of our conscious states some measure of what we may call manifoldness. Sensations, for instance, seem relatively simple; a specific act of reasoning appears to display much manifoldness.

In any given case in a complex organic system the behavior of an elemental part must display more or less of stability in proportion as it does or does not assimilate with the form of behavior existing at the time in the system as a whole. Correspondingly we find that in our conscious life each relatively elemental mental item, say a given thought, displays more or less of mental stability in proportion as it does, or does not, assimilate with the whole conscious system in which it is elemental. This stability we may call its realness. Each mental item, or presentation, must display more or less of this realness,

and the degree of this realness determines whether we describe the mental item as real or unreal.

III

SEC. 11.—Granting, then, the existence of this correspondence between consciousness and behavior, let us ask what are its limits.

Anatomical, histological, and pathological studies have shown us that animal behavior as outwardly observed is the result of trains of behavior in nerve and muscle; and indicate that the trains of behavior in the nervous system, and especially in that part of it which we call the brain, are all-important in relation to the consciousness correspondent with the outwardly observed behavior. The activities in the brain are, indeed, so notably important in this connection that the neurologist of the past was wont to speak of the brain as "the organ of mind." He has of late come to see that this statement involves a materialistic metaphysics, and dimly comprehending the difficulties connected with the defense of materialism he is wont nowadays to abandon this form of expression, contenting himself with something like the statement that there is no psychosis (*i. e.*, mental state) without a corresponding neurosis (*i. e.*, activity in some special part of the nervous system, usually, if not always, in the brain).

This hypothesis seems likely to be true, for we find, if we adopt it, much aid in the comprehension of the nature of consciousness. For instance, if, by accident or operation, we stop the activity or behavior of certain of the brain centres, we lose the possibility of sight experience, and such mutilations enable us to study the adjustments of a limited consciousness to the conditions of life.

But if we go no further than we do in holding that there must be a neurosis if there is to be a psychosis, we leave unexplained many characteristic situations in our conscious experience. For instance, we find certain psychic forms known as solutions of a problem which usually follow upon other psychic forms known as reasoning; and each of these forms is conceived of as corresponding with a definite form of brain activity. At times, however, we are astonished to discover in consciousness the solution of the problem without the anterior experience of reasoning. We, perhaps, go to sleep worried by the fact that it seems to be insoluble, but awaken the next morning to find its solution perfectly clear.

Facts of this kind forced neurologists of the past generation to devise the theory of "unconscious cerebration," which maintained that a given neurosis (*e. g.*, that corresponding with reasoning) was sometimes accompanied by consciousness, and sometimes was not. But this leaves the psychologist in difficulty, for it assumes that at some times and not at others consciousness *comes in* from the outside as it were. This in itself is a surprising fact, if it be a fact. Moreover, we are given no suggestion as to the basis of this coming in at one time and not at another.

The modern conception of so-called "subconscious" mental activities is based upon a more extended observation of the same class of facts, in the course of which it is discovered that in connection with many brain events that are usually called unconscious there really did occur changes in consciousness which were subsequently forgotten, or which at the time failed to catch our attention. It is because of these latter observations that I urge the substitution of the term "subattentive consciousness" for "subconsciousness."

These observations, however, do not go very far to help us, for there remain many steps in brain processes in connection with which we fail to discover any corresponding conscious changes whatever, and this leaves still on our hands the question why and under what conditions does consciousness *come in.*

SEC. 12. The study of subattentive consciousness (the so-called "subconsciousness"), however, leads us to ask whether consciousness really does ever *come in.* We realize that at times its presence is overlooked; may it not be there always, but only at times in form to attract attention in the state of retrospection that is always involved when we search for it?

This suggestion naturally appeals to one of logical turn of mind, for the conclusion that there is no special psychosis without a corresponding and equally special neurosis, at once leads him to ask whether the converse is true; viz., whether it is also true that there is no special neurosis without a corresponding and equally special psychosis. He calls attention to the fact that we habitually overlook many of the brain changes corresponding with marked changes in consciousness, but that this does not lead us to discredit the hypothesis that such brain changes occur. So, he may argue, study of the so-called subconscious shows us that we habitually overlook many of the changes in consciousness corresponding with marked brain changes; but this should not lead us to discredit the hypothesis that such changes in consciousness do occur, but are overlooked.

Let us examine this hypothesis in some detail. It is one that I have called the hypothesis of a thoroughgoing noetic and neururgic* correspondence.

* The term "noetic" is employed, instead of psychic or mental, to indicate that there is a unity of process in consciousness, what

SEC. 13. We cannot claim to have as yet any more than a rudimentary knowledge of the nature of nerve activity; but one point seems very clear, viz., that the nerve system taken as a whole is a vastly complex system of minor systems of active nerve elements. Some of these minor systems, *e. g.*, the spinal cord systems, and especially the brain, are of primary importance, but this must not lead us to overlook the fact that they are part and parcel of the connected nerve system taken as a whole.

If we study any important special part of the nerve system, let us say the brain, we find it also a complex system of minor systems of active nerve elements. As it is with certain activities in the brain part of the nerve system that we discover marked consciousness correspondents, I shall refer to it in what follows, unless I state to the contrary.

The behavior of this complex brain system in any moment is not a mere aggregation of elemental activities; it is a single pulse of activity within the whole system, in which some of the elemental parts are more and some less active. When, then, we think of a marked activity in a special part of the brain, such as has corresponding with it a change in consciousness, we are really referring to what is an *emphasis* of activity within an all-active system. It appears as a specially emphatic activity only in contrast with the great undifferentiable mass of unemphatic activities within the system as a whole.

SEC. 14. Under the hypothesis here considered it is suggested that consciousness also is a complex system of

we call knowledge being a form given implicitly in all conscious situations. The term "neururgic" is a convenient equivalent of "relating to the activity of nerve."

minor systems of mental elements, each of which corresponds with the behavior of a nerve element in the complex brain system.

The consciousness of any moment, then, is not an aggregate of the psychic elements, it is a single pulse of the whole mental system, in which some of the elemental parts are more and some less emphatic. When, then, we find ourselves noting some marked mental form we are really referring to what is a mental *emphasis* within the total psychic system of the moment. It appears as such a special emphasis only in contrast with the great undifferentiable mass of the unemphatic psychic elements.

SEC. 15. Under such an hypothesis it might well be that the noetic and neururgic correspondence is thoroughgoing, for then in correspondence with what we call special brain activities, which are really emphases of activity contrasted with the undifferentiable mass of unemphatic activities, we should find in experience psychic emphases contrasted with an undifferentiable unemphatic psychic mass. We should be likely to speak of them as presentations to a something more of consciousness which we should find ill defined. And this we evidently do. The mental items that appear in attention from moment to moment are actually called presentations; and the something more to which the presentations are given, ill defined, but still appreciated to be part of consciousness, we call the Self. Of this Self we shall speak at length in Chapter III. Let us for the present fix our attention in the main upon the presentations to the Self.

SEC. 16. The test of the correctness of any hypothesis is found in the explanations of phenomena that are given if it is assumed, but which otherwise appear more or less

mysterious. Subjected to this test the hypothesis under consideration is well supported.*

In the first place, the facts which led to the devising of the hypothesis of "unconscious cerebration" are at once seen to be just such as we should expect to find.

Take the instance of the solution of a problem. It is usually, when clearly defined, part of a threefold process. We have: 1. The process of reasoning. 2. The solution of a problem. 3. Action in accord with this solution.

As we have noted the observed solution of a problem (2) usually follows a process of reasoning (1). But we often observe a process of reasoning (1) which is followed at once by action (3), no solution of a problem (2) being brought to our attention; although when we study the process in reflection we find that a problem had to be solved before action could be taken. Here the conscious reasoning (1) may be assumed to have been followed by the consciousness involved by the solution (2), this latter however having failed to hold attention; it was so unemphatic that it was submerged, as it were, as the very emphatic accompaniments of the action held attention.

It may be maintained, then, that in what is known as "unconscious cerebration" the conscious process of reasoning existed, but was so unemphatic in relation to the emphasis of the solution that it altogether failed to appear in attention. In this case the conscious reasoning, and in the former case the conscious solution fell back from the field of attention, and became part and parcel of the field of inattention of the moment.

SEC. 17. The hypothesis also throws a flood of light upon the nature of the so-called "subconscious," which is

* For a detailed consideration of this hypothesis and of its implications, *cf.* my *Consciousness.*

then viewed as a part of the "subattentive consciousness" which cannot be appreciated under normal conditions of alertness, but which can be appreciated under certain other conditions of non-alertness, such as are given in hypnosis, in our dream-like states, and in the artificial situations of quiescence induced by our modern psychoanalysts.

SEC. 18. It may be remarked here that the elements of consciousness noted under such conditions are likely to indicate certain aspects of the nature of the relatively permanent field of inattention which we call the Self. As such they are worthy of close study as indicative of the relatively fixed character of the individual in whom they are observed.

But, on the other hand, the conscious elements that are found in attention make up the part of consciousness that is significant in relation to the conduct that looks to our adjustment to the special conditions of life. This adjustment, which necessarily involves behavior of an experimental type, also necessarily involves repression of certain of the deep-seated impulses. The experiment may fail, and at times the repression may tend to disorganize the system, but the fact remains that Nature's experiments looking to such adjustments cannot be carried on without these attendant repressions. To aim to eliminate the repressions altogether is to aim to thwart Nature in her efforts to perfect behavior.

It would thus appear that the deep-seated impulses brought into prominence by the process of psychoanalysis are of great importance in determining the nature of men's characters; but, in my view, it would also appear that they are not the dominant factors in such of our conduct as enables us to cope with the vicissitudes of

active life, and do not play the part in that conduct which Freud and his followers would have us believe they do.

SEC. 19. We often observe that we note certain mental items under some conditions, but do not note them under other conditions, although the stimulation given to the part of the nerve system whose activity corresponds with the mental item is the same in both cases. The drumming noise of a dripping leader does not appear in attention as I write these words, but, the stimulation to the ear remaining the same, it did appear in attention last night when I was falling asleep; and it appears there now if I drop my pen and listen carefully. This draws our attention to the fact that there exist what are usually spoken of as different "thresholds of consciousness," which, however, were better called different "thresholds of attention."

Under certain conditions of low-grade general brain activity, the activity of a special nerve part may well be emphatic in relation to the activity of the whole system, whereas under conditions of high-grade general brain activity this same grade of activity in the part will not be emphatic in relation to the activity of the whole system. In the case where the grade of general brain activity is low, the mental item corresponding with the relatively emphatic activity of the special nerve part would be expected to appear in attention; while it would not be expected to thus appear where the grade of general brain activity is high. That it does so is indicated, in the case just mentioned, by the fact that I, being now alert, do not note the sound of the dripping leader, while I was annoyed by it last night as I was gaining the quiescent condition called sleep.

The shifting from one grade of brain activity to another

may be slow or rapid. In the former case, which is the more usual, we take no note of the change of threshold. But we are apt to take note of the change when it is sudden. I am quietly writing. A cry of fire induces a condition of violent general activity. After I am calmed down I am likely to note that, for the time being, the subject of my writing was lost to attention.

The most marked condition of general brain quiescence is given in deep sleep. Under such conditions, according to our hypothesis, consciousness still exists, but is of low grade, if we may so speak. We cannot agree that there is any state of unconsciousness so long as life exists.

The most marked of all shifting of thresholds is given when general normal brain activity occurs as we suddenly awaken from sleep. Under such conditions the elements of the sleep consciousness will not be likely to appear emphatic enough to gain attention in the waking consciousness. They will be entirely unnoticed where the sleep has been profound, and the awakening to vivid active mental life is sudden. If, however, the transition from sleep to wide-awakeness is less rapid, and the sleep state thus more or less gradually approaches to conditions of wakefulness, we should expect that certain of the elements of the sleep consciousness that are attachable by association with elements in the wide-awake consciousness, would appear in the latter with the past reference normal to all retrospective elements in attention. This expectation is realized in the form of experience which we describe as dreams, of which we speak again later. Dreams are what we may call the tag ends of the sleep consciousness which cling to the wide-awake consciousness.*

* For a full consideration of the nature of our dream life, *cf.* my article, "Retentiveness and Dreams," *Mind*, vol. xxv, N. S, no. 98.

IV

SEC. 20. Although in so doing I step apart from matters that have direct reference to our problem, I would in closing ask the reader to note briefly some of the results of pressing our hypothesis to its logical conclusion, a subject which I have treated at length in my *Consciousness*, chaps. VI and VII.

The human brain whose activities have so close a correspondence with human consciousness is really but part of the individual's nervous system, and no logical ground can be discovered for refusing to agree that all nerve activity has its psychic correspondent; consciousness, as we men know it, being a specially organized form of this psychic existence, corresponding with a specially organized form of nerve activities of which those in the brain are pre-eminently important.

Taking a different mode of approach, we note that, if we judge of the existence of other consciousnesses than our own by reference to behavior, we find no logical ground for denying the existence of some form of consciousness to animals, even to those displaying forms of organization of the lowest complexity, in which no nerve systems are developed. This leads us to a further step, for we find no valid reason for drawing a sharp line of distinction between nerve tissue and other living tissue, and this in turn leads us to surmise that the real basis of psychic existence is to be found in the transfer of energy within living tissue. This would mean that the consciousness of a human individual consists of the psychic existence corresponding with all the physical activities whose correlation makes his organism what it is; this not

taking from the fact that the brain activities are, of all the physical activities of his body, the most significant for such bits of the total consciousness as can be grasped in attention.

This extension of our thesis has the great point in its favor that it enables us to show that, if it is valid, the time-honored problem as to the beginnings of soul life is based upon a misconception, and is meaningless.*

SEC. 21. Pressing our thesis still further, we are led to ask whether it may not be that transferrence of energy is the real physical correspondent of psychic existence. If it is, then we are led by a new path to the conception of a universal consciousness corresponding with the transfers of energy within the Universe as a whole, of which universal consciousness our human consciousnesses are constituent parts. Such a view, based on other grounds than those here presented, has appealed to many philosophers in the past; Paulson refers it back to Plato and Aristotle, and traces it in the thought of Spinoza and Leibnitz, Schelling and Schopenhauer, and Lotze. It was upheld by Fechner, in his ever-fascinating manner, and has been more or less tentatively maintained by not a few later philosophers.

SEC. 22. Laying aside these speculations we may, in closing, emphasize the main points we have made that refer to the matter of our study, as follows: (1) Each situation in consciousness involves a special and specific mode of behavior. (2) Each mode of human conduct has correspondent with it a special and specific situation in consciousness. (3) The noetic and neururgic correspondence appears to be thoroughgoing.

This means that the adoption of a given attitude of

* *Cf.* my *Consciousness*, p. 166 *f.*

mind, at the same time renders us liable to act as do the most radical of those who display this mental attitude.

It also means that we cannot adopt a given mode of behavior without, at the same time, acquiring the attitude of mind of those who normally display this form of behavior.

CHAPTER II

INSTINCT AND REASON

I

SEC. 1. It is the commonest thing for us in every-day life to note a distinction between behavior that is instinctive, and what which we think of as due to intelligence. We thus find familiar the contrast between Instinct and Reason which gives the title to this chapter.

But when we think in terms of the distinction between consciousness and behavior, as we are now doing, it becomes at once apparent that the concept of instinct relates to one of these fields, viz., to behavior; while the concept of reason relates to the other, viz., to consciousness. If, however, consciousness and behavior are really distinct categories, one would say that the contrasts noted should be found in each field apart from the other; that it should strike us at once as unnatural to contrast a term in one field with a term in the distinctly diverse field.

We find the explanation of the situation at once under the terms of the hypothesis maintained in the preceding chapter, that each specific form of behavior involves a specific form of consciousness, and *vice versa*. We note that in some cases where behavior is noticeable the corresponding consciousness is not, and that in some cases where consciousness is noted the corresponding behavior is not. Under such an interpretation we should say that in the case of instinct the phenomena most easily observed

and classified are phenomena of behavior, and not those of the corresponding conscious states; and that this is the case is clear, as will become very evident as we proceed. Under the same interpretation we should again say that in the case of reason the phenomena most easily observed and classified are the phenomena of consciousness, and not those of the corresponding behavior; and that this is the case is even more clear. The conscious states which we class as rational were for long thought of as quite independent of bodily changes. It is only of late decades that we have come to the conclusion that they must involve activities in the brain, although we have little positive knowledge of the nature of these brain activities.

The fact that this contrast is commonly made would thus seem to be in accord with our hypothesis of a thoroughgoing neururgic and noetic correspondence and, if well established, will go to corroborate that theory. At the same time it indicates that we should properly study the basis of this contrast in each of the two fields separately.

We have instinct-actions in the behavior field, contrasted with reason in the psychic field:

Behavior, —— Instinct-actions *versus* ?
Consciousness, —— ? *versus* Reasoning.

We should ask ourselves what in the psychic field corresponds with instinct actions, and what in the behavior field corresponds with reason or intelligence.

SEC. 2. In answer to the second of these queries we are at once ready to agree that adaptive acts correspond with conscious intelligence, of which reason is looked upon as the most highly developed form. Instinct-actions on their face appear to be called forth to meet

definite needs, and to involve no noticeable adaptation to special conditions, while those acts that do involve such adaptation are very generally called intelligent acts. So here we have the contrast defined in the realm of behavior.

Behavior, —— Instinct-actions *versus* Adaptive actions.

Turning to the psychic field we are led to the suggestion that we should find what we may call "instinct-feelings" corresponding with our instinct-actions. If this is found to be the case, then the contrast within the field of consciousness would appear to be between instinct-feelings and intelligence or reasoning.

Behavior, Instinct-actions *versus* Adaptive actions.
Consciousness, "Instinct-feelings" *versus* Reasoning.

Now it is perfectly clear that certain forms of instinct-actions do involve noticeable changes in consciousness; for instance, there is such a change when I instinctively dodge a threatened blow. We may assume, then, that to each instinct-action there corresponds an instinct-feeling, this being true even though these instinct-feelings are often so unemphatic as to escape our notice. This suggestion is corroborated when we note that certain instinct-actions which usually occur without any noticeable changes in consciousness, sometimes involve an instinct-feeling. One would say that we have no more characteristic example of an instinct-action than the winking of the eyelids, and this is usually altogether "unconscious," as we say. Yet if we turn our attention to it we very easily note a change in consciousness going with the winking; and we may assume that such a change occurred

when we were not watching for it, but that then it was unnoticed.

Let us then consider briefly the contrast here referred to in each of these fields separately.

II. *Instinct-Actions versus Adaptive Actions*

A

SEC. 3. The dodging of a threatened blow is a typical case of what is ordinarily thought of as an instinct-action. Superficially viewed it shows certain clearly discerned characteristics. (1) It is non-hesitant; *i. e.*, it does not have to do with adaptation to conditions, but occurs immediately upon the receipt of the stimulus. (2) It has to do with the preservation of, or with benefit to, the whole organism that reacts. (3) It is due to the existence of tendencies that are inherited. A more careful study of such instinct-actions, however, forces us to revise this superficial judgment.

SEC. 4. In the first place we note that we observe instinct-actions in all animals, from the most complex to the simplest. But the simplest of animals is little different from one of the cells of which more complex animals are constituted; and we are thus led to see that the reactive behavior of the simplest cell within a complex organism must be called its instinct-action; it appears to be non-hesitant; it has to do with the preservation of, or benefit to, the cell; it is due to inherited capacities.

This means that we cannot define instinct-actions exclusively in terms gained from the observation of complex organisms; we must broaden the term to apply to any organic form, whether it be simple or complex. Each more-than-simple cell is a system, and all of the complex

organisms are systems of minor systems of cells. If each cell has its own distinctive instinctive capacities, then under this view the instinct-action displayed by a complex organism is the summation of all the instinct-actions of all the cells forming the minor systems, as these are co-ordinated to form the whole major system.

SEC. 5. When we study those highly complex activities of man that we usually think of as instinctive, non-hesitant, and non-adaptive, we always find them in some small measure adaptive, and to a corresponding degree non-immediate. There is a difference, for instance, between the form of our instinct-action when the blow is threatened from the front, and when from the side; and there is a noticeable hesitancy of reaction when it is not evident from which direction the blow will be delivered.

We are wont, however, to think of ourselves as very exceptional animals, and to study instinct-actions in other animals; and until very lately not a few observers have held that the simpler animals act only instinctively, without hesitation to a definite end, and with no adaptive tendencies. But the more carefully the biologist studies the behavior of animals of these lower forms, the more evidence he finds that some measure of adaptability is bound up with even the simplest forms of instinct-actions.

SEC. 6. Adaptation is correlated with the life-experience of the moment of action; hence very evidently, if each instinct-action of an organism is in some measure adaptable it cannot be true that its instinct-actions are altogether determined by inheritance, which is based upon situations that have existed in the past. Instincts once implanted by processes of inheritance are seldom if ever obliterated, but adaptation appears in the fact that they

may be obstructed in their functioning by contradictory instinctive tendencies.

Attempts have been made to mark the special characteristics of instincts that have not been thus modified, and we have been asked* to apply the name instinctive to those acts alone that do not entail the life experience of the organism in which they appear. All such attempts fail, however. The child at birth sucks instinctively, and the chick just out of the shell pecks instinctively. Superficially viewed, these acts seem to be uninfluenced by the life experience of babe or chick; but in such a view we fail to consider the influence of prenatal experience, which, however, cannot be overlooked, even though it be ill understood.

SEC. 7. The significance of these points in relation to the subject with which we are concerned becomes clear when we turn our thought in another direction; for it is evident that if what has been said above is true, we should expect to find that what at one time appear as distinctly adaptive actions may often gradually acquire the characteristics of what we think of as typical instinct-actions. Such situations we do find in the phenomena of habit.

The animal acquires habits through successive adaptive actions which gradually lose their hesitancy, and finally come to have the appearance of instinct-actions. A man in learning to play golf laboriously and hesitantly undertakes certain special and unnatural arm movements quite different from those he has learned to call instinctive. But gradually these new movements become less labored and more immediate, until finally they appear as rapid as those ascribed to any instinct. If later he applies to an

* By Lloyd Morgan, for instance.

expert for instruction, and undertakes to correct certain habits thus acquired, he finds he must go through the same process anew. He must acquire other new habits.

Habits may thus be described as *pseudo*-instincts.

Of the importance of habit in relation to human conduct I need not speak at length. All who have not done so should read William James's eloquent chapter on "Habit" in his large *Psychology*, and those who have may well reread it in this connection. It is a temptation to quote from it at length, but this might lead the reader to omit the study of it in its entirety.

We are all the victims of habits which, acquired to meet certain conditions, lead us to react inappropriately under others. The writer gets into the habit of snatching up and smoking a cigarette when he is balked in the expression he would give to his thought, until presently he finds he cannot write at all unless he is smoking. Our habits thus come to control us, as we say.

Habits, as I have said, may be called *pseudo*-instincts. They are adaptations based upon the inherited instinctive capacities of the parts of the system involved; but they are not themselves inherited or inheritable. Nevertheless, the imitative tendencies of a race may lead a new generation to copy the habits of those of the older generation still living, and thus there may appear in a race certain habits of action which gain all the appearance of instinct-actions due to inheritance. And these habits of behavior may become instinctive in all vital respects if the race in which they have become fixed prevails in the struggle for existence. The common man makes no discrimination between such *pseudo*-instincts and what the man of science calls true instincts. And under our view as above outlined there is no fundamental

reason why he should do so. It is thus that I think it not improper to stretch a point, and to follow common usage in speaking of a religious instinct in man that is evidenced by the habitual appearance of the behavior characteristic which we describe as religious expression.

SEC. 8. We may pause here a moment to refer to the significance of one aspect of habit in relation to our conduct. When we say that habits grow upon us we mean to say that our habit behavior tends to acquire the immediacy and inadaptability of the true instincts, and then gradually comes to dominate us. If we are to avoid the evil consequences of an undesirable habit we may do so by avoiding the stimuli that lead to the reactions involved: thus the drunkard may isolate himself in a region where no liquor is obtainable; but in that the habit is not broken, it merely remains dormant. The only sure mode of breaking it is to acquire a new and harmless habit that is incompatible with the one from whose dominance we would escape.

SEC. 9. All this indicates that the contrast between instinct-actions and adaptive actions breaks down under close study.

B

SEC. 10. That this conclusion is warranted becomes clear again when we turn to the consideration of that behavior which appears to be distinctly adaptive. For then we note that the activity thus emphasized is always based upon inherited tendencies; it is possible only because the animal has inherited from ancestral forms capacities to react in certain ways to certain stimuli. Even where these capacities have been modified previous to the moment of our observation we see that this modifica-

tion must itself have been dependent upon a previous tendency to a given emphasis of reaction in certain elements of a partial system within the whole complex organic system, *i. e.*, upon the instinct-action of a part of the whole.

The partial emphasis involves the production of a new form in what we may call the "neururgic pattern" of the moment, which leads to a modification of the reaction taken as a whole; and this modification of the moment results in a more or less fundamental modification of all succeeding "neururgic patterns," and of all succeeding corresponding reactions.*

SEC. 11. It thus again appears, as I have remarked above, that the contrast between instinct-actions and adaptive actions breaks down upon detailed examination. Close study indicates that all behavior involves a reference to the past, in what we call inheritance; and, also, a reference to present situations as these will tell in the future, in what we call adaptation. Those complex activities in which the influences from the past are prominent, while those from the present are not, are called instinctive. On the other hand, those complex activities in which the influences from the present are prominent, while those from the past are not, are called adaptive.

Thus it would seem that all activities may be stated in terms of instinct, or in terms of adaptation, as we choose. Or, in other words, if what we call instinct-actions could be sufficiently slowed down they would show all the characteristics of adaptive activities; and if what we call adaptive activities could be sufficiently speeded up they would appear as instinct-actions.

* *Cf.* my "Unity of Process in Consciousness," *Mind*, N. S. XI, 44.

It is to be noted, as a matter of importance, that a great majority of the acts of man that go to constitute his behavior are of the type which we describe as instinctive.

III. Instinct-Feeling versus Reasoning

A

SEC. 12. When I suddenly, without forethought, find myself jumping aside to save myself from being run down by a recklessly driven automobile I experience a vivid change in consciousness, which we have agreed to call an "instinct-feeling." If I jump back instead of forward, I note a somewhat different instinct-feeling; and still another if I dash forward. Such examples serve to indicate that each special form of instinct-action is accompanied by an equally special form of instinct-feeling, as we should expect would be the case if the correspondence between behavior and consciousness is thoroughgoing.

SEC. 13. Our instinct-actions vary in immediacy, and force, and in width of the organic relation involved. *Pari passu* we note changes of emphasis in the corresponding instinct-feelings.

Reflexes are instinct-actions in connection with which the emphasis in consciousness is too slight to be noted; this lack of emphasis being largely due to the fact that they are developed in minor systems practically separated from the major brain system in connection with whose activities in the main are given the conscious emphases with which we deal in waking life.

Where any special form of consciousness is often experienced in emphatic form, it comes to be recognized as such, and to gain a special name. It is thus that we give

the name "sensation" to a special type of conscious forms. This being the case, we should expect to find a special name given to the instinct-feelings where they are commonly experienced in practically the same forms, and where the corresponding instinct-actions must be sudden and forceful, and therefore noticeable, if they are to prove effective. We have such instinct-feelings in what we call our emotions; *e. g.*, surprise, fear, anger, and the rest. The instinctive reactions that are said to express them are sudden and forceful so far as they are effective.

Darwin, studying biology, drew attention to this connection between our emotions and our instinct-actions, adopting the usual view that the emotions cause the corresponding reactions; that we strike, for instance, because we are angry. William James, studying psychology, also called attention to this fact, but held that really the instinct-actions cause the emotions; that we are angry, for instance, because we strike. I do not myself think that we are warranted in upholding either of these views. We do not need to assume the existence of any causal relation between the emotions and their so-called expressive reactions. We have no grounds for holding more than that the specific emotions and certain specific instinct-actions correspond.

That such a correspondence exists becomes clear when we note that, like the well-recognized instinct-actions of the organism, the so-called expressions of our emotions have to do with the preservation of or benefit to the whole organism; that the emotions occur immediately upon the presentation of the object necessary to their stimulation; that they evidently are mental traits that we do not have to learn, and are therefore given to us by inheritance; and that they are not easily controlled or modified to

meet new conditions. Your assertion and my belief that the snake is harmless do not prevent me from experiencing fear, as I run away upon seeing it in my path.

The emotions are experiences of individual men, but where they are felt by all members of a group they often gain a special character. Thus we have mob emotions; thus, also, the nationalized emotions, covetousness, fear, suspicion, yielding nationalized hatred which accompanies the nationalized violence we call war. These group emotions at times appear to have a special character different from that of the corresponding emotions of the individual who stands alone. This, however, is due to the fact that they are constantly stimulated by the concurrent influence of those like-minded men with whom the individual is in contact, and who thus loses control of them.

This control is of great importance to effective living. As we have seen, instincts once given to a race through inheritance are seldom if ever obliterated, but they may be controlled. The restraints of social life tend to prevent the ebullition of emotions, together with their accompanying "expressions," where they are inimical to the social body. But these instinctive tendencies remain in us, and when this social restraint is removed, as it is when the whole community act together, when in fact the social contact reduplicates constantly the stimulation that calls them forth, then they appear in the form they had before such social restraints had appeared. Thus in war, for instance, we see a return to the emotional forms, and the corresponding behavior, of the primeval savage.

SEC. 14. In this connection it is important to remember that each variation of a complex instinct-action involves a corresponding variation of its instinct-feeling. We name our emotions not because the instinct-action

and its instinct-feeling are in each case identically the same, but because the fundamentals of the behavior and of the emotion each display a close likeness. We take cognizance only of generic distinctions and likenesses. Thus I say I am overwhelmed by fear whether I flee in panic from a danger or crouch in perfect quiescence to avoid it. But it is easy to recognize that as the instinct-actions differ materially in the two cases, the emotions are not by any means the same; they are merely very like one another in their fundamental nature.*

Shand† has called our attention to the fact that we have certain instinctive general tendencies, which have definite biological ends, which may give rise under different conditions to what we recognize to be very diverse instinct-actions. He teaches us further that what we call our sentiments are the psychic correspondents of these

* 1. James, and lately Cannon, have shown us that probably the common basis amidst such diversity is to be found in the likeness of visceral and other obscure sensations in the cases considered.

Prof. R. S. Woodworth, in his admirable *Dynamic Psychology* (p. 54), defines an emotion as "the way the body feels when it is *prepared* for a certain reaction." (Italics mine.) As the reader will note, I should say *when it reacts;* the typical emotions being, in my view, the psychic correspondent of instinctive reactions.

Surprise, for instance, can certainly not be defined in Prof. Woodworth's terms, but can be in mine.

The emotion felt when one actually fights is true anger. The so-called anger which is felt when we are merely prepared to fight is a quite different experience. And yet it too is the psychic correspondent of the instinct-action occurring at the moment considered.

So the emotion felt when one flees from danger is true fear. The so-called fear which is felt when we are merely prepared to flee is a quite different experience; so different, in fact, that it often is given a special name; viz., anxiety or dread. And yet it too is the psychic correspondent of the instinct-actions occurring at the moment considered.

† *Foundations of Character.*

instinctive general tendencies. Thus the instinctive general tendency of the mother to protect her young may lead her to cherish and caress her babe, or to flee with it from danger, or to fight violently; and correspondingly the sentiment of affection (Shand would use the term love) may yield in some cases love, in others fear, in others anger.

We thus again see emphasized the closeness of the correspondence between behavior and consciousness, and are confirmed in our view that each differentiation of behavior involves a like differentiation in conscious experience, and *vice versa.*

SEC. 15. As we have seen, instinct-actions vary as the width of the physical systems involved varies. Correspondingly our instinct-feelings must vary as the width of the psychic systems involved varies.

The instinct-feelings thus far considered are the correspondents of instinct-actions which relate to the welfare of the whole human body. But we note special instinct-actions of limited scope that relate to the welfare of a part of the body, as when the hand is quickly withdrawn from a hot object. In such a case we note, apart from the burning heat involved in the stimulus to action, a clear instinct-feeling in connection with the quick withdrawal of the hand. Examples of this kind, in connection with the evidence we have of a thoroughgoing neururgic and noetic correspondence, lead us again to see that each instinct-action, whether complex or simple, has its corresponding complex or simple instinct-feeling.

SEC. 16. But here we are led to take a further step. In all that has thus far been said we have considered only the instinct-feelings corresponding with reactions of the organism upon the environment. But if we are justified

in holding that there is a unity of process in physical action, and that even the reaction of the simplest individual part is its instinct-action, then we must look for instinct-feelings corresponding with the activities corresponding to the resultants of stimuli acting upon us from our environment. It would thus appear that a sensation, for instance, is the instinct-feeling corresponding with the instinct-action of a special brain part; and that all our "states of mind" may be looked upon as special forms of instinct-feelings. The significance of this point will appear later.

B

SEC. 17. When we turn from the consideration of our instinct-feelings to the study of what we call intelligence and reason we find ourselves dealing with as sharp a contrast as that noted between instinctive and adaptive actions. Intelligence and reason are slow and hesitant; they are related to mental matters that we have to try out and learn. Their very essence seems to lie in modification.

But when we come to look into the matter we see that intelligence works with mental elements that are themselves given as immediate, that do not have to be learned, and that have an obdurate unwillingness to give up their specific characters. Intelligence itself is the process of adjudicating conflicting claims for influence of more or less incompatible mental items.

All this, particularly in connection with our previous studies, suggests that the sharp distinction between instinct-feeling and intelligence is not warranted.

SEC. 18. In this view we are confirmed when we consider again the phenomena of habit, and observe the men-

tal states that correspond with the changes of mode of activity involved. The person who learns to play on the piano begins with actions that are accompanied with marked states of consciousness of the order of intelligence. He has to learn by intelligent effort, as he says, *pari passu* with the modifications of his usual finger activities. But as these newer activities gradually lose their hesitancy the experience of intelligent effort becomes also gradually less marked. As the activities become more and more "automatic," and put on the form of *pseudo*-instincts, so also the situations in consciousness take forms more and more closely allied with instinct-feelings rather than with intelligence; and finally, when the activities proximate to the reflex form, even his instinct-feelings fail to be sufficiently emphatic to be appreciated, and he is likely to tell us that he is entirely "unconscious" of his finger movements.

SEC. 19. These facts are so impressive that not a few thinkers of the past have held that all our so-called unconscious instinct-actions have originally been intelligently acquired in the past. This view had its measure of support so long as it was held that habits acquired by an individual could be transmitted by inheritance as instincts. But modern studies have led us to see that such transmission of acquired traits is highly improbable.

Under our view there not only now is, but always has been, some form of conscious correspondent of the activities in question, whether or not these modes of consciousness have been appreciated by the individual animal. Where they have been thus appreciated, however, there is no reason to hold that they must have appeared in the form of intelligence; they are much more likely to have appeared in general in the form of vague instinct-feelings

as the processes of acquisition have been slow and in minute particulars, and have thus involved but slight psychic emphases within the consciousness of the individual concerned.

SEC. 20. All this surely suggests that as there is a unity of process in the field of physical activity, so there is a unity of process in consciousness; and that as, under close examination, the distinction between instinct and adaptation in the field of behavior breaks down, so in the field of consciousness the distinction between instinct-feeling and intelligence breaks down.* It indicates, in the one case as in the other, that all activities and all their corresponding conscious states involve a reference to the past, and a reference to present situations as these will tell in the future. It indicates that those complex states of consciousness in which the influences from the past are prominent, while those from the present are not, are what we appreciate as instinct-feelings; and on the other hand, that those complex states in which the influences from the present are prominent, while those from the past are not, are what we appreciate as forms of intelligence, the most clearly defined of which is known as the process of reasoning.

Thus it would appear that all forms of consciousness may be stated in terms of instinct-feeling, or in terms of intelligence, as we choose; just as the corresponding forms of behavior may be stated in terms of instinct or of adaptation, as we choose. Or, in other words, if the process we call instinct-feeling could be sufficiently slowed down it would show all the characteristics of intelligence; and if what we call intelligence could be made rapid

* *Cf.* my "The Unity of Process in Consciousness," *Mind*, N. S., XI, 44,

enough it would appear as mere instinct-feeling. The difference is one of what Royce called the "time-span."

C

SEC. 21. In the light of what has thus been said we may now consider certain further distinctions made within the psychic field.

The most marked form of consciousness corresponding with adaptation is what we know as reasoning. As deliberation and hesitancy decrease we no longer usually describe the psychic situation as rational but rather merely as intelligent. In both cases the result is a course of action, or of thought, looked upon as the outcome of the reasoning, or of the intelligence, as the case may be.

In the realm of reasoning we have, as we have seen, cases of what were once called "unconscious cerebration," where, to our surprise, the result is reached, say the solution of a problem, without any recognition of the steps of reasoning that usually precede such a result. If our conceptions are valid we might expect to note certain other cases where there would be lacking even this recognition of the fact that processes of reasoning might be expected to precede the result. We should then have a resultant which would appear to be of the nature of an instinct-feeling but which would have the force of a rational guidance; which would seem, however, to rise out of the air, so to speak. Such resultants we have in what we call our intuitions.

Where these resultants relate to the field of ideas we have what we call intuitive knowledge. As philosophical students have concerned themselves mainly with the field of ideas the conception of intuition has usually been

tacitly limited to the realm of what we call knowledge. But evidently the process here considered must be one of general application; while the result may appear in the mere emphasis of the realness of an idea, it may also appear in the emphasis of an impulse to action. The recognition of this we find in the modern shifting of the meaning of the term intuition to refer to our impulsive life; as, for instance, in the writings of Henri Bergson.

This latter use of the term is seen to be justified as soon as we think with care, for then we perceive that a given special mental state is involved when we feel that we pass judgments without recognized reasoned antecedents, and that this is the same whether the judgment relates to the realm of ideas, as where we make intuitive judgments as to the characters of men we meet, or whether it relates to the field of impulse, as where we properly speak, for instance, of the intuition which leads us to take a specific path when we are lost in the forest.

Thus it appears that while it is improper to limit the process known as intuition to the realm of ideas or of knowledge, as was the habit of our philosophical ancestors, it is equally improper to limit it to the realm of impulse, as is the tendency in our own time.

The form of impulsive intuition that is most significant in relation to conduct is that which we call the leading of conscience, of which we shall have more to say in the sequel.

SEC. 22. As we have noted in Section 10 above, we find that the process of adaptation in the field of behavior appears as the emphasis of activity in some neural element in a minor system within the whole organic system. So we discover by reflection that the process of reasoning corresponding with this adaptation appears as

the emphasis of some psychic element in a complex psychic presentation,* which emphasis involves the production of a new form in the "noetic pattern" of the moment; and we note, also, that this modification of the "noetic pattern" of the moment results in a more or less fundamental modification which affects all succeeding "noetic patterns."

SEC. 23. If now we turn to that most interesting phenomenon of intelligence, *i. e.*, of our conscious experiences in which adaptation seems implicated; viz., the will-act, which appears to dissolve our uncertainties and hesitancies, and to result in adaptive activities, we note that in cases of persistent hesitancy, or of persistent opposition between incompatible tendencies to reaction, the neural emphasis which finally breaks down the opposition must be due to the influence of the undifferentiable mass of unemphatic activities in the system of systems taken as a whole. We at once see, therefore, how it happens that in reflective consciousness the influence which involves the will-act that resolves the doubt, or breaks down the hesitancy, appears to arise from the Self, which we have seen reason to believe is that undifferentiable mass of unemphatic elements within the whole of consciousness in contrast with which the psychic emphases called presentations appear. Of this we shall speak more in detail in the chapter to follow.

SEC. 24. We may sum up the main conclusions of this chapter as follows: All behavior is influenced (1) by past situations, as these are related to the present; and (2) by situations in the present as these relate to the future. This yields two aspects, *A* and *B*, in connection with each act. *A*. Where condition (1) is empha-

* *Cf.* my *Instinct and Reason*, p. 458.

sized and condition (2) is overlooked, we call the act instinctive. *B*. Where condition (2) is emphasized, and condition (1) is overlooked, we call the act adaptive.

All behavior displays a unity of process.

Corresponding to these behavior situations we have given in consciousness, as presentations to the Self, in case *A*, what we call "instinct-feelings," of which emotions and intuitions are special forms; and in case *B* intelligence and reasoning.

All situations in consciousness display a unity of process.

It is to be noted, as a matter of prime importance, that a vastly large proportion of the consciousness of man is of the type that we have described as instinct-feeling, only a relatively small proportion being of the type which we describe as intelligent or rational; this corresponding with the fact that a vast proportion of his behavior is of the type that we describe as instinctive, and a small proportion of the type that we describe as adaptive. There is no ground for the claim that the conduct of man is in general guided by reason, or that he is distinguishable from the animals as being a distinctly rational animal.

CHAPTER III

THE SELF

SEC. 1. Thus far in our consideration of behavior and of consciousness we have concerned ourselves with those emphases of activity within the physical system which correspond with the psychic emphases which we call our presentations, which I have at times spoken of as mental items; viz., our sensations, emotions, ideas of one sort or another, etc. But the emphases of physical activity appear as such only because they are contrasted with an undifferentiable mass of unemphatic elemental physical activities; and, if the theory of a thoroughgoing noetic and neururgic correspondence is correct, the psychic emphases must also appear as such only because they are contrasted with an undifferentiable mass of psychic elements.

As I have said, we are wont to speak of these psychic emphases as presentations; and this, of course, implies that there is a something else of consciousness to which the presentations are given. This something else of consciousness we call the Self—our presentations are presentations to the Self, and it therefore seems probable that this Self is the name we give to the undifferentiable mass of psychic elements here referred to, to which the presentations accrue.

We commonly speak of the Self as though we were able to apprehend it in experience exactly as we apprehend the presentations to it. But evidently this cannot be.

For that to which the presentations are given cannot be itself a presentation. The Self of any moment is necessarily non-presentable.

We do, of course, have an *idea* of the Self; it is such an idea that is before our minds as I write and you read. And this idea is a presentation, but a presentation to what? Evidently to a Self of the moment which is not presented in that moment.

The Self of which I write, and of which you read, is what we may call the conceptual Self. It is a presented concept, just as the notion of the attraction of gravitation is a presented concept.

All presentations, as we have seen, correspond with emphases of physical activity which affect our behavior. Thus the concept of the attraction of gravitation, given as a presentation when I walk on the edge of a precipice, is accompanied by activities that lead me to step back from, rather than over, the brink. So in like manner the concept of the Self may be given as a presentation; and if one of its characteristics is that noted in our description of it as a perdurable entity, it, when presented to mind, may be accompanied by activities that prevent me from committing suicide.

No one conception has significance in relation to *all* conduct. Each conception has significance in relation to conduct only at the moment of presentation. This is the case with the conception (*e. g.*) of the attraction of gravitation, and it is also the case with the conceptual Self.

This is not true, however, of the real non-presentable Self of the moment's experience. This is *always* significant in relation to conduct. It is significant when the presentation of the conceptual Self is concurrent with behavior preventing me from suicide, and it is also sig-

nificant when the presentation of the attraction of gravitation is concurrent with movements away from the brink of the precipice. It is always significant in relation to behavior whatever the presentation of the moment may be. And nevertheless this Self of the moment is itself non-presentable.

It is to be noted that we are not concerned here to consider the nature of what is called the soul. What we mean when we speak of the soul may or may not be identical with what we mean when we speak of the Self. I, myself, am inclined to think it is. But this is a matter in dispute, certain metaphysicians holding that the soul is a "substance" involved with the existence of the Self but not identical with it.* This question, however, is apart from the matters we have under consideration and may be passed by without further comment.

SEC. 2. But, it may be asked, "How is the statement that the Self is non-presentable compatible with my experience when I say I am self-conscious. Surely in cases of self-consciousness I have before my mind what I call my self as related to what is given to that self; and this self appears to be just as much of a presentation as that which is given to it." And in truth this self of self-consciousness is a presentation; but in that very fact we have sure proof that it is not the real Self of the moment's experience. It may be an image of the real Self of a past moment; it may indeed be a simulacrum of that real Self, but it certainly is not the real Self of the moment in which it is given. It is what is often called an empirical ego.

That this is true becomes very clear as soon as we study its nature with care. No one can doubt it who has read the tenth chapter of William James's *Psychology*.

* *Cf.* Prof. John Laird's *Problems of the Self*, chap. XIII.

As Hume put it long ago: "For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch *myself* at any time without a perception, and never can observe anything but the perception."

In reading the words of James above referred to one may interpret his term "the self of selves," which is evidenced by our sense of spontaneity, to refer really to a presented Self, and not to an empirical ego. He tells us* that whenever one's "introspective glance succeeds in turning around quickly enough to catch one of these manifestations of spontaneity in the act, all it can ever feel distinctly is some bodily process, for the most part taking place within the head." But evidently all that we discover by this process of "turning around quickly" is a bit that has scaled off, if we may so speak, from an empirical ego, a bit of relatively clear stuff of the nature of a presentation.

SEC. 3. There is little else in experience in which the average man takes so great an interest as in his Self, and it is therefore peculiarly disconcerting to him to be told that he not only never has observed, but never can observe, its characteristics directly. This disturbance of mind is removed, however, when we consider that the analytical examination of any of our presentations, of an orange or of an emotion, for example, involves reflexion; and that in reflexion we are dealing not with the original of what we study, not with the original presentation of the orange or of the emotion, but with an image of it, which we find by experiment to be, in greater or less degree, its simulacrum, and indicative of its real nature.

* *Psychology*, I, p. 300.

So we may comfort ourselves by assuming that the ego of self-consciousness is an image of the real Self, and that it is a simulacrum of it, and that in examining this ego we shall be able to grasp the fundamental characteristics of this real Self by indirection. Indeed, we find that we are fully justified in making this assumption when we study the matter more closely.* It may be well to make use of parallel columns in order to present the matter clearly.

Brain Behavior	*Consciousness*
SEC. 4. The brain is a vastly complex system of minor nerve systems. The elements of each of these minor systems must be supposed to be more closely interrelated than are the minor systems themselves one with another; it is indeed only because of this close bond between the elements within the minor systems that these latter appear as special parts within the whole wide system.	SEC. 4*a*. Consciousness is a vastly complex system of minor psychic systems. The elements of these minor psychic systems must be supposed to be more closely interrelated than are the minor systems themselves one with another; it is indeed only because of this close bond between the psychic elements within the minor psychic systems that these latter appear as special and partial constituents of the whole wide psychic system of consciousness. We have an example of such minor psychic systems in what we call our percepts.
Certain groups of these minor nerve systems may in turn be more closely bound together than other groups. Moreover, a wide array of these groups of minor systems may become	Certain groups of these minor psychic systems may in turn be more closely bound together than other groups. Moreover, a wide array of these groups of minor psychic systems may become

* For a more detailed study of this point, *cf.* my *Consciousness*, pp. 37 *ff.*, and chaps. XXI, XXII, and XXIII.

closely bound together to form a system of a higher order, which will still be a minor sytem within the whole active brain.

SEC. 5. Such a minor nerve system of a higher order may well exist in a more or less stable form, distinguishable only by its activities *as a mass*, within the still broader whole brain system. Then we might expect the activities within such a broad undifferentiable mass to appear, *as a unit*, as an increment of activity to the sum total of that of the vastly complex brain system as a whole.

SEC. 6. And at times we might expect to find some very emphatic elemental nerve activity dragging into emphasis this undifferentiable mass of minor system activities; and then we should find the emphatic elemental activity appearing as an increment to this minor system mass.

The two together, viz., the emphatic more elemental activity and the emphasized mass of activities to which it accrues, would then both together appear as a complex emphasis within the more highly complex neururgic system as a whole, and would thus stand in contrast with the still more complex and still less differentiable mass of unem-

closely bound together to form a system of a higher order, which will still be a minor system within the whole of consciousness.

SEC. 5*a*. Such a minor psychic system of a higher order may well exist in a more or less stable form, distinguishable only *as a mass* within the still broader system of consciousness. Then we might expect such a broad and undifferentiable psychic mass to appear *as a unit*, as a psychic emphasis within consciousness, such as we speak of as a presentation to the Self.

SEC. 6*a*. And at times we might expect to find some emphatic elemental psychic part dragging into emphasis this broad and undifferentiable psychic mass; and then the emphatic psychic element would appear as a psychic emphasis in contrast with the broad and undifferentiable psychic mass.

The two together, viz., the emphatic more elemental psychic part, and the broad and undifferentiable psychic mass would then appear both together as a complex emphasis within the whole of consciousness.

It is thus that we may picture to ourselves the presentation we call self-consciousness.

What we have described as

phatic activities of the major system taken as a whole.

the broad and undifferentiable psychic mass which is brought into emphases *as a mass*, is what we call the empirical ego. As such an emphasis it becomes a presentation to the non-presentable Self of the moment.

What we have described as the psychic more elemental part which drags the ego into prominence is also presented to the Self, it being at the same time an increment, or presentation, to the ego.

Let me attempt to represent this diagrammatically.

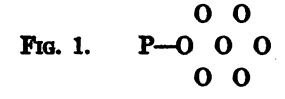

FIG. 1.

Suppose the capital O's in the above figure to represent the mass group of undifferentiable minor psychic systems, which appears as the empirical ego; and P the emphatic, more elemental part which appears as the presentation to this ego.

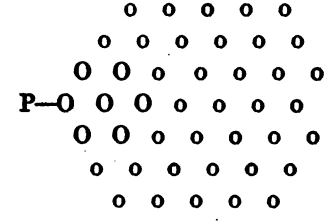

FIG. 2.

Fig. 2 will then represent the whole state of "self-consciousness"; the non-presented Self being represented by the grouping of small o's, to which is presented the whole of the emphasized group shown in Fig. 1, consisting of the ego and its presentation.

Now it is to be noted that the diagram of Fig. 1 as a whole is a simulacrum of Fig. 2 taken as a whole. That is to say, as P in

O O

Fig. 1 is to the emphasized mass of minor systems O O O rep-

O O

O O

resenting the ego; so the whole group P—O O O in Fig. 2 is to

O O

the mass of small o's representing the unemphasized and undifferentiable systemic mass which is the non-presented Self.

SEC. 7. We may take it for granted then that it is possible to conceive of the presented empirical ego of self-consciousness as being, not indeed the actual Self of the moment, and yet as being an image, and a simulacrum of the Self of the moment upon which our reflective attention is fixed.

The importance of this consideration lies in this. Whenever we study analytically the nature of a given mental state we deal, as we have seen, not with the state as originally given, but with its image, which we assume to be a simulacrum of that original state; and for this assumption we have warrant, as is indicated by the resultants of the analyses we make of these images. Thus it would appear that, although the empirical ego of self-consciousness is no more than an image of the Self, nevertheless, as it is its simulacrum, we may have confidence that in the study of it we shall discover the fundamental characteristics of the Self.

SEC. 8. The first point of interest that strikes us is that, as we have found a unity of process to prevail throughout consciousness, we must hold that this process

relates not only to all presentations, but also to that part of consciousness which we call the Self, to which the presentations are given; and if this is so, then the main characteristics discovered in our study of presentations should be found in our study of the empirical ego, and must be assumed to be characteristic of the Self of which the empirical ego is the simulacrum.

SEC. 9. When we consider our presentations as a whole we note one marked characteristic in their changeableness or mutability. If we let ourselves go, as we say, in revery we appear to be watching an ever-changing stream. And even where we attempt to anchor some bit of the driftwood in this stream, by fixing our attention upon it, we discover that its aspects constantly alter; and that, however strong our anchor chain of attention be made, the object of reflection is soon swept away from our inner view. The limits of attention are well-known to the psychologist.

Now we usually think of the Self and of the ego of self-consciousness as something fixed and unalterable; but if it is fundamentally of the same nature as the clearer presentations, this cannot be true. That it is not true is indeed involved with our assumption that the Self is part of consciousness, and especially that all of consciousness has a correspondent in bodily activities of which the activities in the brain seem to us to be the most significant; for in the brain no such fixity or unalterability can exist. As Prof. James well said:* "Whilst we think our brain changes, and like the aurora borealis its whole internal equilibrium shifts with every pulse of change. The precise nature of the shifting at a given moment is the product of many factors. . . . But just as one of

* *Psychology*, I, p. 234.

them certainly is the influence of outward objects on the sense-organs during the moment, so is another certainly the very special susceptibility in which the organ has been left at that moment by all it has gone through in the past. Every brain state is partly determined by the nature of this entire past succession. It is out of the question then that any total brain state should identically recur. Something like it may recur, but to suppose it to recur would be equivalent to the absurd admission that all the states that had intervened between its two appearances had been pure nonentities, and that the organ after their passage was exactly what it was before."

SEC. 10. How, then, do we happen to be so thoroughly convinced, as most of us are, that the Self is an unchanging entity. It would seem that we gain this notion because the Self is only analyzable through the study of its image, or simulacrum, the empirical ego; and because the mutability of this empirical ego is very much less noticeable than that of our clear presentations which display this characteristic very markedly—so much less noticeable, indeed, that the ego seems immutable by contrast. This is not surprising inasmuch as the important characteristic of the empirical ego is its mass form, if we may so speak. Its elements are by hypothesis undifferentiable, and therefore changes in them are unnoticeable. If any considerable change occurred in any one of these elements, this element would in that fact become an emphasized element, and would stand apart from the undifferentiable mass and would appear as part and parcel of the recognized presentation. This is what happens when we study it as Hume did, as recorded above.

This mutability of the ego is thus usually, and naturally, masked by the fact that successive empirical egos change

but little in their general form, so that where two or more of these egos are compared in reflection they show the characteristics which lead us to apply to them the term "the same"; such parts of each as suffer any considerable change being thought of as apart from the egos themselves, and as belonging to the recognized presentations. But "sameness" does not mean identity; it indeed precludes identity. Where identity exists only one presentation of greater strength than the two identicals exists. Comparison involves differences in the objects compared, and we make a comparison whenever we attribute "sameness" to two objects, as we do to successive empirical egos.*

Now if we agree that the empirical ego is constantly changing in form, and at the same time that the ego is a simulacrum of the non-presentable Self, then we reach the somewhat startling conclusion that the real Self must also be a mutable thing. I say this is a startling conclusion because, if there is any one thing that the average man thinks of as a permanent existence it is his own Self. But let us look at the facts.

SEC. 11. A man's character, in any moment, as objectively viewed, corresponds with the whole of the man's consciousness, and this consciousness is surely inclusive of his Self, which we indeed agree has a very special significance in relation to this character. When, then, we judge thus objectively of the nature of other men's Selves we are especially struck by their individuality, *i. e.*, by the fact that no two of them are ever exactly alike. We are all ready to agree that in any moment chosen for consideration the Self of each of those under observation is a unique Self.

* *Cf.* my *Consciousness*, pp. 61 *ff.*

But just such differences as thus appear in different individuals in any one moment, appear also in one and the same individual at different moments. If our judgment in the first case is justified, we are bound to agree that a man who displays such differences in separate moments has different Selves in these two moments.

In fact we tacitly acknowledge that the Self is changeable in agreeing that the character of a man may develop, for the nature of his Self is of preponderant importance in the definition of his character.

I am certainly a very different Self in this moment from the Self I was twenty years ago. But the change has not been a sudden one. I cannot name a time when I noted a change. It must have been very gradual, or else so common in experience that it was not noticed. In fact, it was both.

The changes of Self are of constant occurrence in each individual in every-day life, but they are not noticed, because in reflection we grasp the simulacra of the Selves of successive moments, *i. e.*, successive empirical egos; and because, noting no distinction between them, we look upon these empirical egos as "the same" in the successive moments considered. And we note no distinction between the simulacra examined because the changes referred to are very gradual and of insignificant moment. In truth, as we have seen, if they were of significant moment they would in that fact be so emphasized as to become at once part and parcel of the recognized presentation.

There are times, however, when men do recognize the change we speak of subjectively. A man will tell you that his very self was changed in the moment of religious conversion. He commonly speaks also of his "better"

and his "worse" selves. And those unfortunate persons of whom we speak as double personalities are not infrequently bewildered as they recall the images of these past selves, not being sure who they are. As objectively viewed, men in the past have spoken of the changes from better to worse selves as due to the man's being "possessed," in the latter case by an evil spirit other than his real self.

The cases of "double personality," so well known nowadays through Morton Prince's very widely read studies of Miss Beauchamp, in his *Dissociations of a Personality*, appear as signal evidence of the view here forced upon us. They are no longer mysterious; they are merely unusual in the fact that the bonds are broken which usually tie together our diverse selves so firmly that we fail to note their real separateness of nature.

SEC. 12. Let us consider another aspect of the behavior of the nerve system. The stimulus reaching my ear from the dripping leader does not noticeably affect my behavior when I am vigorous and alert, as I am as I write these lines. Last night, when I was falling asleep, it affected me sufficiently to lead me to get up and close my window. This example draws our attention to the fact that the grade of activity of the whole nerve system determines whether stimuli to activity, from outside the system, or indeed from some minor system within the whole system, shall or shall not appear to be emphatic, and influential in regard to the form of reaction of the system as a whole; or, in other words, determines whether the stimuli are, or are not, assimilated by the whole system. The activities of the main body of the system may thus be said to *control* the activities of its special parts.

The corresponding situation in consciousness to which

this points is found in the *control* exercised by the Self. The nature of the non-presented Self determines whether certain presentations shall or shall not be so far assimilated by the conscious system as a whole as to alter its nature in more or less important particulars. It is of the very essence of the advance of man that he has learned to make use of this control in dealing with his presented natural impulses and ideas.

If what we have above said is true, then emphatic presentations, corresponding with very powerful stimuli, should be expected to lessen so materially the control by the Self that the individual would feel that no such control existed; and this expectation is met in experience. A man will tell you, for instance, that the sight of the fire in the theatre brought with it so much of sudden fear that he was forced to run to save himself, even at the expense of the lives of those around him. After the fact he will with sorrow agree that he altogether "lost control of himself."

Such loss of control may be due to a presentation of a quite abnormal degree of emphasis, as in the case above noted; but it may also occur where the presentation is of quite moderate force, provided the state of consciousness is subnormally active, if we may so speak. Thus it is that there is a seeming lack of control by the self in cases of lassitude and spiritless revery. Then presentations of one kind or another follow in succession without any such correlation as is observed in our wide-awake life, where the self so far controls the given presentations as to compel the development of psychic elements that are not incompatible in what we know as a more or less logical order. When we thus "let ourselves go" we find no obstruction to the wildest of fancies.

A similar situation, but much emphasized, occurs during sleep. Dreams, as we have seen, are but the "tag-ends," so to speak, of the sleep consciousness. We should therefore expect to find, as we do find, that the lack of control by the self is here very manifest. Our dreams usually appear most absurdly inconsistent and inconsequent, and yet that they differ only in degree in this respect from the flow of thought in cases of revery is indicated in the fact that the images of these latter states are often called "day-dreams."

It is also to be noted that the medical practitioner who employs the method of so-called "psychoanalysis," which is made so much of in these days by Freud and his disciples, induces in his patient, artificially, conditions very similar to those just referred to. Here the control by the self is notably lacking. Yet it is this control by the self in our wide-awake life that is most significant in relation to our conduct. It is true that primal impulses remain in us; but, as has been said above, the very essence of the advance of man lies in the fact that he has learned to place these primal impulses under control of the self. And this control is given in our wide-awake, and not in our dormant, or semidormant, states. The study of the nature of these latter states of consciousness, while valuable, without doubt, in special instances, would appear to be of distinctly minor importance, in general, in relation to the conduct of civilized man.

SEC. 13. So fully are the parts of the brain system integrated that when control is exercised by the mass of the system in powerful degree it would seem likely that with the special part controlled there would also appear in emphasis the activities of the broad undifferentiable minor systems most directly concerned with the control.

Correspondingly, whenever the control by the whole complex psychic system of the Self is powerful it would seem that there must usually be raised into emphasis, within the total psychic system, a whole complex minor system of undifferentiable psychic parts with which the presentation to the whole system is most directly related in this process of control. This minor complex psychic system will then itself appear as a presentation which will be a simulacrum of the whole Self; in other words, it will be an empirical ego. Thus it happens that in all cases where the control by the Self is clearly recognized we find ourselves dealing with what we call self-consciousness. We feel that the ego is efficient, whether this efficiency is, or is not, overcome by the force of the presentation. This sense of efficiency is of the essence of what we know as conation.

We should expect to note, and as a matter of fact we do note, cases where two presentations are given which are so opposed that the development of the one is incompatible with the development of the other. Then the influence of the Self will determine which of the two incompatibles shall prevail. Then we experience the efficiency of the control by the Self, symbolized in the efficient act of the empirical ego, in an act of will. Then we make a choice.

Where the two incompatibles are within the realm of impulse we note hesitancy, and then decision through an act of will. Where the two incompatibles are within the realm of ideas we note a state which we describe as doubt, and then acceptance of the one or the other of the incompatible ideas through an act of will in what we call believing. When we believe, the Self, appreciated through its simulacrum the empirical ego, resolves the doubt by

an act of will which results in the realization of one of the incompatibles, and the loss of realness by the other.

We can never experience belief, except as the resolution of a doubt; and we can never believe without willing to believe.

SEC. 14. The use of the phrase "willing to believe" must recall to the reader's mind William James's famous essay, entitled *The Will to Believe*, which aroused so much controversy in the last decade; and the fact that this controversy arose may appear to cast doubt upon the validity of the statement made above that each act of believing involves an act of will. It is to be noted, however, that the question before us is not the one raised by James in the essay referred to and which was attacked by his opponents; for, as will appear in our final chapter, he was concerned to justify the propriety in certain cases of belief where no rational leadings could be found, or even at times in opposition to such rational leadings.

It may, however, occur to some reader that the statement above made is altogether too broad, for he may point to the fact that large numbers of what we call our beliefs seem to involve no question of choice, but appear to be forced upon us by tradition, or even by inheritance. Thus a large proportion of the members of the Christian community feel that they have a firm belief in all the statements in the Apostles' Creed which they repeat from time to time, and have repeated since childhood.

But what are these so-called beliefs? They certainly are not acts of believing such as concern us here. They are ideas which are so real that no doubt as to this realness is ever noted. As James says: "An idea that is not contradicted is *ipso facto* believed, etc." In other words, these so-called beliefs are ideas—ideas that are so fully

real that if this realness is questioned, *i. e.*, if doubt is raised, the ego at once reacts to overthrow the opposition in favor of the "belief" in an act of believing.

Our so-called "beliefs" are thus seen to be no more than firmly established conceptions. Their significance is found not in their inherent nature, but in the fact that in one way or another they have become thus thoroughly established. This is far too often overlooked; those who overlook it tending to maintain a dogmatic attitude which is obstructive of effort to attain to a fuller knowledge of the truth.

The state of doubt conditioning an act of belief may be altogether unemphatic, so unemphatic, in fact, as to be overlooked entirely; as, for instance, in the case of the belief in God's existence. Careful introspection will show, however, that such a conditioning state of doubt does exist wherever the experience of belief occurs, and that this doubt is always resolved by an act of the Self in willing. The doubt may be so instantly resolved that it is altogether overlooked, as for example in the instant reply that will be given by most men to the question: "Do you believe in the existence of God?" Here the one questioned is likely to say that he has not, and never has had, a doubt as to the existence of God. But one must consider that in the very entertainment of the question he brings before his mind the idea "there is no God," this idea being placed in contradistinction to the incompatible idea "there is a God"; and that in such contradistinction we have the characteristics which involve the state of doubt. This doubt may be instantly resolved, as we have said, and its very existence may be overlooked; but it must be there if we are to have the experience of believing; and this experience of believing involves the resolu-

tion of the doubt by the, in this case, all but instantaneous acceptance of one of the incompatibles by the Self through an act of will.

SEC. 15. Where the normal reactions of the organism are perfectly fitted to meet existing situations, no emphasis of activity is given within the physical system as a whole, and there is in consciousness no corresponding psychic emphasis or presentation; we are commonly said to be unconscious of our reflex acts, for instance. Where more or less of adaptation is required to meet these situations, we have more or less of emphasis of activity of parts within the physical system, and correspondingly more or less clear presentations in consciousness.

Where this adaptive process is hesitant, and therefore marked, we have in consciousness the appearance of alternatives of impulses or of ideas, and also of an empirical ego controlling the development of the one or of the other through volitional action. In the realm of ideas this process is known as the process of reasoning.

Thus it appears that all rational acts are volitional, a fact that will be readily acknowledged, for we recognize the control by the ego, not only in slow and clearly defined reasoning processes, but even in the most ill-defined process of mere attention that is necessary to any act of intelligence.

The reverse would also appear to hold true, viz., that all volition is rational; for the ego's control is not appreciated except where adaptation is called for, and all adaptive acts are, as we have seen in the previous chapter, of the nature of rational acts, although not always clearly defined as such. This view, however, is not so easy to accept, for it involves the assertion that the ego never acts irrationally, and this involves the defense of the

somewhat startling notion that no man actually does knowingly err or sin.

A problem is thus raised which demands close examination. But we may defer this until we have, in Chapter V, considered certain other points involving an analysis that will be found helpful in relation to the one here brought to our attention.

SEC. 16. Let us in closing summarize the main points we have made in this chapter.

The special forms of behavior observable are emphases of activity within an all-active complex physical system, and appear as such emphases in contrast with the undifferentiated mass of unemphatic activities. Correspondingly, what we call our "presentations" given in attention are psychic emphases within the whole complex psychic system of consciousness, and appear as presentations in contrast with the undifferentiated unemphatic psychic mass which is a something more of consciousness. In any moment this "something more of consciousness" is the Self to which the presentations are given.

This Self cannot be presented. The ego of self-consciousness is a presentation, and therefore cannot be the Self of the moment. It is, however, the image of the Self, a simulacrum of the Self, from the observation of which the general nature of the Self may be judged.

Our presentations are constantly changing. If we agree that there is a unity of process in consciousness it follows that the Self must also be constantly changing. Of this we find evidence when we study the nature of the ego of self-consciousness which appears to be a simulacrum of the Self.

The Self *controls*, and thus defines the nature of the

whole of consciousness of any moment—of what is presented and of what is not. This is evidenced in the control exercised by the ego, the simulacrum of the Self, in states of self-consciousness.

PART II

SOME IMPLICATIONS OF THE CORRELATION

CHAPTER IV

CREATIVENESS AND IDEALS

I. *Creativeness*

SEC. 1. In the considerations of the preceding chapter we have overlooked one of the most marked characteristics attributed by the average man to the Self, as he studies its nature in the observation of its simulacrum, the empirical ego of self-consciousness. I refer to the attribute of creativeness, of its capacity to produce newness.

In our alert, wide-awake life we are not content to watch the stream of presentations that flow before the mind's eye, if we may use the language of common speech; we appear to direct the course of the stream, we seem to grasp some of the mental items that float into the field of mental vision and to hold them, now to play with them, as it were, and again to make use of them. Other equally noticeable mental items we allow to slip by; still others we push out of sight. And in all this we seem to discern some measure of personal initiative.

But beyond this we find in the experience of the inventor and of the "creative artist"—and we are all to some degree inventors and artists—distinct evidences of the ability of the Self to actually create new mental forms that are in no sense found in the presentations that are given to us. The mind of a great inventor like Edison seems to be markedly creative. A master-musician like

Beethoven gives us what his fellow musicians do not hesitate to speak of as "creations."

Again, we find in mind what we call purposes which we feel that we ourselves have formed, and which we aim to accomplish. Nor does this sense of the Self's creativeness stop there; for in connection with our intuitions, our so-called "inspirations," which rise out of the field of non-awareness, we have our fullest experience of this creative spontaneity.

Evidently if the hypothesis of a thoroughgoing correspondence between behavior and consciousness is valid there must be in the field of behavior an objective creativeness corresponding with this subjectively noted psychic creativeness.

SEC. 2. But there have always been those who have been impressed by the fact that we are able to trace the origin of a large proportion of our mental states to situations in our environment, and also impressed by the so-called mechanical order discovered in this environment; who have held that it must be that we misinterpret our experience of consciousness in this particular, that this notion of the creativeness of the Self must be an illusion. And such voices are loudly heard in our day, when we have come to see how closely our states of consciousness are related with the activities in the brain, which is part of Nature, and subject, as we say, to the laws that are there found to prevail. It may be well for us, therefore, to consider this subject in some little detail.

SEC. 3. A large proportion of thoughtful people in our day have become interested in the concept of creativeness since the publication of the book entitled *Creative Evolution*, by Henri Bergson, in whom we recognize an opponent of the extension of mechanical conceptions to ac-

count for all biological phenomena. Most of us have also dipped sufficiently into the current of modern biological theory to realize that even among experts in biology the mechanists do not hold the field unchallenged; that the so-called vitalists contest the validity of their claims.

We must not fail to note, however, that the contest between mechanism and vitalism is one that is of biological concern only, while the contest between mechanism and creativeness has broad philosophical significance. The problems presented in the two cases are often confused for the reason that the advocates of creativeness in the philosophical field, and the advocates of vitalism in the biological field, both stand opposed to the biological mechanist, and thus arises the notion that the hypotheses of the vitalist and of the creationist are identical. Thus vitalists like Driesch tend to shift from biological to metaphysical ground, and often apparently without realizing that they are no longer arguing as biologists; and philosophical creationists like Bergson are generally held to be vitalists by mechanistic biologists.

SEC. 4. With the contention of the vitalist in biology we have, strictly speaking, nothing to do, but it may be permissible to speak of it briefly in consideration of the fact that the vitalists, as I have above said, join with the philosophical creationists in their dissatisfaction with the current biological theory that animal behavior in general, and man's activities in particular, can be satisfactorily stated in terms of mechanism.

The vitalists, denying this, assume the existence of an *entelechy* to which mechanism bears in a sense a subordinate relation. My own inexpert study in this direction

leads me to agree with the well-known Oxford physiologist, J. S. Haldane, who holds* that this conception merely restates in somewhat mystical terms the questions at issue. Haldane, of course, acknowledges the cogency of the evidence presented by the biological mechanists; but he, in common with many other eminent biologists, holds that the mechanistic conception is no more than a working hypothesis. Accepted as such it may be quite properly employed in practical investigations as a valuable tool even by those who hesitate to accept it as final.

In general I think it must be agreed that we are very far from having proof that life can be explained altogether in terms of mechanism, and I am sympathetic with Haldane's contention that the phenomena of life compel us to take account of a thoroughly non-mechanical concept in *organization*, which is inclusive of mechanism, but a concept of a higher order. Even if we were able to prove conclusively that mechanism holds through and through in biology, we should still be faced by the problem: Why do elements, as subject to mechanical laws, organize at all, and why in any particular of so great a variety of ways?

SEC. 5. The claim of the mechanist that brings him into opposition to the upholder of creativeness is that all biological facts, inclusive of those relative to that human behavior which corresponds with consciousness, either now are, or eventually will be, statable in terms of the laws of Nature, which are in their turn statable in mechanical terms. He acknowledges that he cannot as yet thus explain all biological facts; but he tells us that this is merely because of the limitations of our powers of

* *Mechanism, Life, and Personality.*

observation, and of consequent failure to grasp the exact nature of the facts observed. He objects to the hypothesis of creativeness on the ground that it suggests that a psychic somewhat, which is of a quite unmechanical nature, at times enters in to disturb the order of cause and effect in the mechanical series, and he holds that this conception is merely dragged in to explain matters that are for the moment obscure. He holds, in fine, that the creationist claims that the laws of Nature can be subverted by an extraneous psychic force; and that, apart from the subjective feeling that the Self is able in a measure to control behavior, there is no evidence whatever of the existence of this hypothetical psychical creativeness.

This claim leads us to ask ourselves in the first place what we mean when we speak of a law of Nature; and in the second place, whether it is true that there is no objective evidence of creativeness that will harmonize with the subjective evidence of general experience which he would teach us must be an illusion.

SEC. 6. It is scarcely creditable to human intelligence, and yet it is true, that men in general think of a law of Nature as an observed fact, whereas it is merely a generalization based upon certain aspects of observed facts. They speak of being governed by laws of Nature as though these laws were fixed and immutable powers external to us and, indeed, external to Nature, which bind us and Nature, of which we are part, with chains. They look upon themselves as the slaves, as it were, of these laws so far as they apply, and think of them with something like terror.

Such being the case, we may well emphasize the fact that these so-called laws of Nature are mental constructs.

They are concepts that develop as the result of our appreciation of the characteristics of perceptions of outer-world objects, much as these perceptions develop as the result of appreciated sensations. The laws of Nature are concepts of what appears to be fixed and immutable in the perceptual facts observed. If these perceptual facts take on new aspects the nature of the particular concepts under consideration must change, *and then the laws will change.*

This must not be taken to imply a belief that the Universe is a purely haphazard affair, so to speak, without order and determinate form. Our very conception of a Universe involves the appreciation of the fact that we do find a large measure of orderliness in the small portion of this Universe that is subject to our observation, and a belief that were we omniscient we should find it to be a Universe of a perfectly determinate order. What I wish to emphasize is the fact that our conceptions of this orderliness, as formulated in what we call the laws of Nature, are merely tentative and relative to the measure of our knowledge.

SEC. 7. But I would especially lay stress upon the point that the laws of Nature are not themselves observed facts; that, in other words, they are not found in direct perceptual observation, but are mental constructs of what we call the conceptual order.

William James in his psychological studies emphasized the fact that there exist many diverse "worlds of reality," or as I prefer to put it, many diverse "worlds of realness"; and he showed us that given mental items that are very real in one of these "worlds" may be very unreal in another.* Thus the "world of sense" which covers perceptual observation is quite diverse from the "world

* *Cf.* Appendix I, Division II.

of science," in which we find the concepts of the laws of Nature, upon one of which the mechanistic hypothesis is based. A close examination of the nature of this mechanistic hypothesis serves to bring out clearly the diversity of these "worlds."

This concept of mechanism is evidently one that is based primarily upon the study of motions of inorganic bodies, and has become established because it serves our purpose in co-ordinating many situations observable in the material world in which we live. In maintaining it in relation to this inorganic world, however, we choose to overlook many of the characteristics observable in these natural bodies and their relations as they are given in the "world of sense."

For instance, because it serves our purpose in taking this view, we choose to assume the existence of an ethereal medium, agreeing to overlook the fundamental difficulties connected with the definition of this medium as conceived, and the fact that its assumed characteristics transcend, and are even incompatible with, experiences that are familiar to us in our observation of the "world of sense." In like manner, we choose to overlook the difficulties connected with the conception of potential energy, and with the distinction between kinetic and potential energy, which latter cannot be said to be more than a name devised to describe the absence of all perceptual signs of energy. Again, we choose to overlook the problems relating to the basis of the transformation of energy from potential to kinetic forms, and *vice versa*, as well as the more fundamental problems arising when we attempt to account for the existence of diverse forms of energy, and look for the basis of the transfer from one form to another. Beyond this we overlook the difficulties con-

nected with the assumption of a closed energetic system, as well as those connected with the assumption of a beginning of the conditions that have led to present situations.

All these are difficulties and inconsistencies lost sight of when we build up the quite artificial "world of mechanism" as a mode of interpretation of the phenomena observed in the *inorganic* world. When we turn to the study of *organic* life we again note motion followed by motion, and are again tempted to take a mechanistic view. But a new difficulty arises here in the fact that vital energy appears diverse from all other forms of energy. Even if this vital energy is finally shown to be resolvable into the forms found in the inorganic world which have given rise to the mechanistic conception, the same problems above referred to in considering that conception must be overlooked if we are to make the conception work, and a new one in connection with the attempt to account for the basis of the rise of the vital energy form. In organic life, moreover, we find a new formidable difficulty in the existence of the capacity of inheritance; but especially of the capacity of variation involved in the development of one form from another, which, as Stout says, is as important a fact as inheritance.

All this shows that we are dealing with a very artificially restricted conception when we picture the Universe in terms of energy, or of motion followed by motion. In other words, we are choosing to dwell, for the time being, not in the "world" of every-day experience, but in what, from the standpoint of this every-day experience, is a "make-believe world," just as much as the imaginative "world" of *Alice in Wonderland* and the "world" of the shadow pantomime are "make-believe worlds."

SEC. 8. Let us look at this matter from a different

angle. When we think of an individual of any kind we do not conceive of something that is isolated. We cannot describe an individual thing without implying that it is part and parcel of some kind of system; and this is true whether we speak of an individual drop of water, of an individual plant, of an individual human body, or of an individual consciousness. That is to say, an individual, unique though it be, is an entity in which the characteristics of a given system are exemplified. If it ceases to display these characteristics its individuality changes. I am now an individual living man; but were I struck dead this instant I should at once become an individual of another type, in a different system, that is, in a system of non-living beings; and this because I should then display the characteristics of non-living tissue, and not those of living men.

Now when these characteristics of a system are carefully formulated we call them laws of that system. Thus chemical laws indicate distinctive characteristics of chemical systems; biological laws indicate distinctive characteristics of living beings; psychological laws indicate distinctive characteristics of consciousness; and in general natural laws indicate distinctive characteristics of Nature as a whole.

Thus it appears that an individual exists as such because it exemplifies the laws of the system in which it is an individual. And this leads us to see at once that when we speak of an individual of any kind as being "governed by" laws of any kind, we mean no more than that the individual shows itself to be included in a system whose characteristics are statable in terms of these laws; were it not so "governed" it would no longer be an individual in the particular system in which these laws obtain.

When, then, we say that a man is "governed by" nat-

ural laws, we mean no more than that we find him to be part and parcel of Nature as we comprehend it.

This is certainly a source of satisfaction. It would be distinctly unsatisfactory were each of us compelled to think of himself as an isolated waif in this vast Universe which we call Nature. On the other hand, it is eminently interesting, to me at least, to be able to look upon myself as being so far a part of Nature that I must have my small share in making it what it is. For if I am part of Nature, then the characteristics that make Nature what it is must include my characteristics.

Now, among these characteristics of mine which go to make Nature what it is, is my consciousness; and this consciousness is inclusive of the sense of my own creative spontaneity that is so marked a characteristic of my experience. Thus it appears that we cannot properly comprehend Nature unless we include in our thought an interpretation of this sense of the Self's creativeness.

SEC. 9. We are thus brought to a position from which we may turn to the question whether there is any objective evidence of creativeness in Nature corresponding with the sense of spontaneity observed by each of us in our inner experience. If there is, then it would appear as the process which results in observable newness in the world about us; and this process might be properly described as *objective creativeness*.

It is to be noted that this concept of objective creativeness stands on all fours with the concept of subjective creativeness, and that each of them stands on all fours with the concept of mechanism. No one of these concepts is an observed fact, but each is equally based upon our observation of Nature as we study it. The concept

of objective creativeness, like that of subjective creativeness, is thus thoroughly legitimate. Whether the one or the other is better grounded is a matter to be considered.

SEC. 10. The concept of objective creativeness, as we have seen, must be based upon observable newness in Nature. That we have such newness forced upon our attention at every turn in our study of Nature is perfectly clear; and this would suggest that objective creativeness may be a general characteristic of Nature which is for one reason or another frequently overlooked.

The forms of this objectively observed newness in Nature which especially interest us in this study are new forms of behavior in living creatures, of which human behavior is a particular instance. This newness of human behavior points to a special exemplification of objective creativeness.

SEC. 11. But the mechanist tells us that we have here in this newness of behavior no more than a particular case of what is found throughout Nature, viz., the redistribution of energy, which is an adequate explanation of all forms of newness as objectively observed. He asks us to look upon the Universe as something akin to a vastly complex clock-like machine that was once upon a time wound up, so to speak, and is now in process of running down; and he holds that all the varied forms of structure and of behavior observed in this Universe are the results of this redistribution of energy occurring in the course of this process of running down.

But when he applies the mechanistic hypothesis to organic life he must overlook the fact that a clock cannot wind itself or repair one of its broken wheels; whereas an animal does act to sustain itself, and does replace missing parts. An eminent biologist once said to me that he

never ceased to wonder at what happens when one scratches one's skin. Then cells are exposed which at once begin to do something quite new to them; viz., to make new skin. As Kant says:* "An organized being is not a mere machine; for that has merely moving power, but it possesses in itself formative power of a self-propagating kind which it communicates to its materials though they have it not themselves; it organizes them, in fact, and this cannot be explained by the mere mechanical faculty of motion."

The mechanist is wont to smile at the credulity of men who for so long accepted the notion that the Universe was created in six days by God, who then ceased from his labors; but he overlooks the fact that he makes a very similar assumption. He assumes that at one moment at least in the history of the Universe objective creativeness appeared; for he tells us that at some indefinite time in the past this huge clock-like machine was wound up. Or to put the matter less colloquially, he assumes that at some moment in the indefinite past there was a primal stirring up of a homogeneity, to use something like Herbert Spencer's terminology, or what we may speak of as a primal ebullition of energy, which started the redistributions of energy observable in the Universe; and that to this primal fact we must trace all the varieties in the world as we find it.

Thus it appears that, after all, there is little excuse for the scientist's disdain in dealing with the scriptural account of the origin of varieties which, with many other similar accounts devised by other early thinkers than the Hebrews, is now relegated to the realm of poetry. For both the modern scientist's own view, as well as the

* *Critique of Judgement*, Bernard's translation, pp. 278–9.

one they reject, agree in the acceptance of objective creativeness, limiting it, however, to some moment in the past, but within some finite time, after which moment it ceased to exist as such. A similar "once-for-all-ness" is expressed, or implied, by Bergson in his account of creativeness; but the close scrutiny to which the doctrines of this talented philosopher have been subjected has brought to light no little difficulty in the acceptance of this particular notion.

SEC. 12. All this leads us to ask whether no other hypothesis is available; and when we turn our thought in this direction we perceive at once that there is another possible hypothesis which appears to meet the facts equally well, and which on its face seems more likely to be true than the hypothesis that this objective creativeness was given once for all, and that since the initial moment it has gained no increment. This other hypothesis I have elsewhere* put somewhat as follows: Instead of assuming a moment of creativeness too far back in time to be defined, it certainly seems more reasonable to assume that this physical creativeness always has been, and now is, operative throughout the whole of Nature, but that its results are so minute in any particular moment that they are likely to escape our observation and are usually only discoverable when we take into consideration long periods of time, as we do when we study the geological record and note the continuous development of living forms, as Darwin did.

This difficulty of observation may be due in part to the minuteness of the effects of this creative process, and

* Address printed in the *British Journal of Psychology*, November, 1912.

to the crudeness of our modes of observation; but it may also be due in large part to the fact that the objects observed are systems of minor systems in which latter the functioning of this creative process is, with more or less completeness, mutually inhibited. Indeed, it must be thus mutually inhibited if the minor systems are to remain synthesized in a higher system. In inorganic bodies these mutual inhibitions within correlated systems may be supposed to be relatively fixed; and this may be taken to account for the fact that in the inorganic world evidences of this creative process are especially difficult to discern. Organic bodies, on the other hand, may be supposed to be in a state of relatively unstable equilibrium, so that in them the mutual inhibitions of this creative process within correlated systems are less fixed than is the case in inorganic bodies. This may be taken to account for the fact that in connection with organic bodies phenomena are commonly observed which may be held to be results of this creative process—phenomena that have led to the adoption of the unsatisfying theory of the vitalists which assumes, in opposition to the hypothesis here suggested, the existence in them of some "vital principle" or "entelechy" (Driesch) which acts in a manner wholly different from anything known in the inorganic world.

SEC. 13. Now, it is to be noted that if evidence of such objective creativeness did appear in animal organisms, this evidence would surely be looked for in connection with modifications of their typical activities. And such modifications of typical reactions in individual animals we do constantly observe in what we know as accommodations to changes in the animal's surroundings, and in

what we speak of as "learning by experience," using this phrase altogether objectively as relating to observable changes in the animal's habits of action. We see this in the altered reactions of the wild animal that is tamed; in the tricks we teach our pet dogs. And the modern biologist tells us that these characteristics are observable even in the very lowest forms of animal life, which until lately had been thought to be incapable of such "learning by experience."

But we men and women are living animal individuals, and in us, as in all animals, there appear, as we all know, many modifications of typical activities in our attempts to adjust ourselves to the changing conditions of our environment. Peary, when he went to the North Pole, changed his habits of action. Roosevelt, when he explored the tropical regions, changed his habits in an entirely different manner. In fact, men are more capable than any other animals of "learning by experience," and of accommodating themselves to their surroundings. We men and women thus show very markedly in our own lives the modifications of the typical actions which we have seen to be indicative of what I have called objective creativeness.

SEC. 14. All this we discover by the study of Nature without any reference whatever to correlatives in consciousness. But it is a very significant fact in this connection that these adaptations of our own conduct to meet special situations, which when looked at objectively as the biologist views them are modifications of typical activities, and "learning by experience," are in our own case accompanied by what, in a subjective view, we call intelligence. We feel that we act intelligently when we, like Peary and Roosevelt, adapt our habits to meet new

climatic conditions, and when we "learn by experience," let us say, to handle carefully a coffee-pot by which we have once been burned.

This leads us to note that it is in connection with these exhibitions of intelligence that we find the most distinct sense of what we call our creative spontaneity. Where intelligence is observed, especially in the process of reasoning and the will-acts that follow, we feel that we are active agents in the formulation of ends and in the invention of certain purposes which involve these modifications of typical activities, and in the actual production of these modifications themselves.

Prof. R. S. Woodworth* has lately made it clear that "any mechanism . . . once it is aroused, is capable of furnishing its own drive, and also of lending drive to other connected mechanisms." This finds its analogue in the psychic field in the fact that each mental item, once it is aroused, is capable of a movement beyond itself; in other words, has conative capacity.

But this conativeness yields mental newness, which in introspection gives us the evidence of *subjective creativeness*. And on the physical side we have in this "drive of the mechanism" a resultant in objectively noted newness; which thus gives us evidence of *objective creativeness*.

Certain conclusions from all this seem inevitable. In the first place, we see that this sense of our own creative spontaneity corresponds with what we have found to be justly described as an objective creativeness exhibited in the modification of typical bodily activities.

In the second place, we note that, inasmuch as this sense of creative spontaneity is, as we have seen, found in all of consciousness so far as we can study it in reflection,

* *Dynamic Psychology*, p. 67, *et al.*

it must be held that this creative spontaneity belongs to all of human consciousness, and that the corresponding objective creativeness belongs to all those activities of our living bodies which correspond with this consciousness.

SEC. 15. And now I would remind the reader of the broad nature of consciousness which we considered in our introductory chapter, where we saw that as a logical extension of our habitual mode of attribution of consciousness to animals by the interpretation of animal behavior we are not only forced to grant some form of consciousness to all forms of living matter, but that we are led to look upon the Universe as itself pulsating with psychic life. And I would ask him to consider a conclusion naturally reached from this point of view.

The scientist who studies Nature tells us that our bodily activities are part of the activities of the physical Universe, all of which are fundamentally of the same nature. If, then, some type of mentality corresponds with all these activities of the physical Universe, and if consciousness, as we appreciate it, always has in it this creative spontaneity, which is paralleled by an objective creativeness in the bodily activities that correspond with the consciousness, then very evidently the presumption is that the whole Universe is replete with this creativeness, physical and mental, and that in our observation of Nature we do not see plain evidence of this fact merely because of our blindness or short-sightedness.

We are thus brought back to the position already reached by our previous study, viz., that physical creativeness always has been, and now is, operative throughout the whole of Nature, but that its results are so minute in any particular moment that they escape our observation under ordinary conditions.

SEC. 16. This conclusion is very significant to us in our every-day life, for it enables us to answer certain puzzling questions constantly raised in our minds.

In the first place, it breaks down once for all every ground for fatalism. For it shows us that what we appreciate as our creative spontaneity is effective; its efficiency corresponding with that of an objective creativeness found in connection with our activities as naturalistically considered; which objective creativeness is usually masked or altogether overlooked.

In the second place, this conception removes all the sources of discomfort so often connected in our minds with what is known as the deterministic point of view. Determinism is based upon the conviction that observation always shows given causes yielding given effects; and that if a specific cause appears, a specific effect, and none other, must result. This is often taken to mean that we cannot influence the movement of things by our creativeness. But surely determinism in itself does not involve any such doctrine. It is only thought to do so because fatalism is usually considered to be necessarily involved with determinism; which is certainly not the case.

Fatalism is a metaphysical doctrine that denies the existence of creative spontaneity, which determinism does not do. If the determinist finds evidence of the existence of this creativeness he accepts it as he accepts anything else in Nature that may be construed to be a cause. A determinist should be unwilling to overlook any evidence whatever of any determinant, and if among these determinants he finds this characteristic which we call creativeness, and which appears as the cause of observable effects, then he must treat it exactly as he treats

all other causes. So it would appear that the determinist, if he is logical, cannot be a fatalist; for if he considers all the evidence he is bound to agree to recognize this creative spontaneity as one of the possible efficient causes in Nature.

SEC. 17. And finally we may turn again to the so-called mechanistic hypothesis, whose adherents tell us that all our activities may be shown to be statable in terms of physical and chemical reactions which, in their turn, are statable in terms of purely mechanical principles. Here, again, we find that the maintenance of this mechanistic hypothesis does not lead to fatalism, or to the pessimism engendered by fatalistic conceptions. For the most philosophically minded among our biologists are content to look upon this mechanistic theory merely as a good working hypothesis, as an effective tool, as a method that has practical value in biological work.

In a late address* the distinguished biologist, Dr. Edmund B. Wilson, tells us: "The scientific method is the mechanistic method. The moment we swerve from it by a single step we set foot in a foreign land where a different idiom from ours is spoken. We have, it is true, no proof of its final validity. We do not adopt the mechanistic view of organic nature as a dogma, *but only as a practical programme of work*, neither more nor less." Thus, also, J. S. Haldane, the eminent Oxford physiologist, in the work already referred to,† says: "Again and again mechanical theories of one sort or another have served as temporary working hypotheses round which experimental investigation has centred in physiology";

* As president of the American Association for the Advancement of Science, 1914. See *Science*, January 1, 1915. (Italics mine.)

† *Op. cit.*, pp. 60, 61.

but "as a physiologist I can see no use for the hypothesis that life, as a whole, is a mechanical process. This theory does not help me in my work; and, indeed, I think it now hinders very seriously the progress of physiology."

The philosophically minded mechanistic biologist will merely say that, if this so-called creative spontaneity is an efficient cause, it is very rarely evidenced in observable form, and that he is warranted, therefore, in overlooking it in his investigations just as the astronomer, for instance, is warranted in overlooking the perturbations of the orbit of Neptune due to the existence of the relatively minute asteroids, which cannot affect the results with which he is concerned.

The fatalist denies the existence of creativeness, refusing to listen to much cogent evidence in favor of this existence, of which I have given but a few details. The mechanist in biology, on the other hand, in his ordinary studies of living forms, merely agrees to overlook it, for the reason that these studies involve the concentration of his attention upon matters that in any event can seldom be affected by it. Whenever, however, the biologist does by chance note what may be taken as evidence of its existence he is very alert at once, as is clear when one considers the enormous interest excited by De Vries's experiments with his primrose "sports" that breed true; and by those of T. H. Morgan with his flies, in which he has noted a large number of quite new characteristics that are transmitted to the descendants of those individuals in which they appear.

II. *Ideals*

SEC. 18. We have seen in what has preceded this that there is cogent evidence in favor of the view that our

sense of creativeness is indicative of a corresponding objective creativeness in Nature, evidence which leads us to reject the notion that this conception of the creativeness of the Self is illusory, as the mechanist in biology would teach us. Were this evidence unsatisfying, however, we should, in my view, be compelled to deny the mechanist's claim as the result of our study of the everyday occurrences in our conscious experience.

Every time we express an intention we deal with the creation of the idea of some situation which does not exist at the moment; and by further acts of creativeness we adopt means to realize what we intend to accomplish. Evidence of the same kind is found when we consider the nature of what we call our ideals.

Our ideals are images of situations that we recognize to be at the moment unrealized in Nature as we find it, but which we long to see realized. Our ideals of conduct are conceptions of just action which we hope may be possible of attainment, but which we recognize to be unattained, in whole or in part. *E. g.*, the ideal of the artist is a fulness of beauty which he longs to create, but which he has not yet approached.

All this is trite enough. But there is one point in connection with it that is very significant. If we consider the nature of our ordinary *ideas*, exclusive of the ideals here considered, we find that practically all of them are connected directly or indirectly with the action upon us of objective conditions in Nature; that they are interpretations of what we find in Nature. Thus the idea of heat is the resultant of experiences yielded by our contact with hot bodies.

But when we consider our *ideals* we find them to be ideas of a special form that involve a step beyond the

mere interpretation of anything existing in Nature; for it is of the very essence of an ideal that the image or idea conceived is *not* realized. Clearly, in thus stepping beyond what is found in Nature we display the strongest possible evidence of the existence of our creativeness.

SEC. 19. But there is another fact in connection with these ideals that serves to show the efficiency of our creative spontaneity. Not only do we create ideals of what is not at the moment realized in Nature, but we actually by our own effort may in some measure effect their realization in Nature. These ideals, being not yet realized, do not exist in Nature until, acting creatively, we put them there. We attempt, and at times are able, to force them upon Nature, and in this again display our creative energy.

Had an inquisitive spirit from Mars visited this earth a few hundred years ago, bent upon making report of his findings to his Martian Scientific Association, and had he studied the social conditions then existing in western Europe, he would have discovered no signs whatever of any procedure looking to the education of the common people, such as he would find if he revisited us to-day. Nature, then, as he would now view it, would appear to have changed, and this change has been brought about mainly through the creation by men of ideals of educational opportunities for the people at large, which at the moment did not exist, but which by persistent effort have now become very largely realized. By his own creative spontaneity man has thus forced upon Nature a characteristic which did not obtain these few hundred years ago.

SEC. 20. But it may occur to some reader that the statements made above are much too broad, and he may

point in evidence to the existence of what we may call *traditional ideals;* which, he may say, are surely not created by us, but are rather given to us. Thus he may tell us that ideals of truth-telling and simple honesty were taught to him by his parents, and were thus forced upon him without any exercise of his spontaneity.

But here we are led to ask how these traditional ideals can ever have come into existence. They cannot have sprung up suddenly, full-fledged, *as traditional.* Each of them must have first appeared as the result of the insight of some individual seer, whose ideal appealed to those he influenced; who, in turn, by teaching it to their children, made it a traditional ideal. Still, while some may agree that these traditional ideals represent the spontaneity of men of the past, they may nevertheless find no ground for holding that the ideals they personally gain by education or tradition are in any way what they are because of their own spontaneity, until they note that, although these traditional ideals are suggested to us, nevertheless we must ourselves act upon them; we must either accept them as they are given to us, or must modify them; and in the one case, as in the other, the activity of our Selves is involved. If we accept them we make them ours by an act of will, which is always there, although often lost sight of. If, on the other hand, we attempt to modify them, we in this very fact actually create for ourselves, by our own spontaneity, new ideals diverse from those which we modify.

SEC. 21. By way of illustration, let me ask the reader to consider one of our most commonplace modern ideals which is so firmly established, and so thoroughly objectified, that we come to look upon it not as an ideal of our own at all but as a fact in Nature.

We usually think of progress as something discovered in Nature. In reality it is an ideal of our own; an ideal concerning ideals. Progress is an unfolding of situations in accord with our ideals of what this unfolding ought to show. Nature displays changes of various kinds; it is we who interpret these changes as being in accord with, or not in accord with, our ideals of what these changes should be. If these changes accord with these ideals we say that we note progress. If they do not, we say we note retrogression, or at least stagnation.

We think of the development of vertebrate animals from other forms as a mark of progress, and these other forms from which they developed as lower animals; but this only because we men are vertebrates and our ideal is human dominance, and because the characteristic attributes of human life, while found in large measure in all vertebrates, are not found in the invertebrates. But I can well imagine a philosopher among the ants, with ideals of racial significance diverse from ours, arguing that the development of the vertebrates represents, not progress but retrogression, and actually supporting his contention by the acknowledgments of certain modern human philosophers who glorify instinct at the expense of intellect.

That progress is an ideal of ours, and not a fact otherwise existing in Nature, is further evidenced in our efforts, and at times successful efforts, to put this ideal into Nature where it does not now exist. We are all progressives. Having by our own creativeness gained an ideal of those changes which constitute progress, we again are often able actually to realize this ideal, which would not be found in Nature but for our creativeness.

Much the same line of thought is suggested in relation

to the conception of purpose. There is little convincing evidence of the existence of purpose in Nature. Purpose, as we see it in Nature, is an interpretation we make when we find the unfolding of her processes in accord with our ideals of purpose. We put purpose into Nature.

A similar mode of consideration leads us to see that what we call our idea of Good is also an ideal of ours—an idea of something that does not exist in Nature but which we wish to realize, and that Evil exists only in contrast with this idea of Good.

SEC. 22. Now, surely, in all this we are dealing with a most significant fact. For in the very persistency with which we cling to these conceptions of progress, of purpose, of the Good, we have evidence of the force of that spontaneity which enables us to create these ideals of progress, of purpose, of the Good; and in some measure to effect their realization in Nature, where otherwise they would not obtain.

Of the tremendous force of our ideals in the determination of human conduct we do not need to speak. We may but mention as an example the revolution in man's mode of life that has resulted from the creation of his ideal of individual liberty, and from the resultant struggles to realize this ideal.

SEC. 23. We may sum up the most significant points made above as follows:

One of the marked characteristics of the Self, as judged from the nature of the empirical ego, is creativeness.

When we look for the correspondent of this in the field of behavior we find evidence that all behavior involves objective creativeness. Correspondingly, it would seem that all consciousness involves subjective creativeness.

It appears further that this creativeness attracts our

attention most fully in connection with adaptive acts in the realm of behavior, and in connection with their correspondents in intelligence and reasoning in the realm of consciousness.

The most marked evidence of our creativeness is given in the existence of ideals, which do not correspond with anything already existing in our world, but which we create and devise means to realize.

CHAPTER V

FREEDOM AND RESPONSIBILITY

I. *Freedom*

A

SEC. 1. The consideration of the mechanist's contentions in the preceding chapter naturally turns our thought to the position he takes in regard to the time-honored doctrine of the "freedom of the will."

This phrase we may note at once is unsatisfactory as descriptive of the subject under debate. It comes to us as a relic of the old "faculty-psychology" which would have had us cut up the mind into separate entities called faculties, each concerned with a very special mode of functioning, and one of them being the faculty of will. But long ago Locke* asked us to note that "the question is not proper whether the will be free, but whether a man be free." In other words, what we know as an act of will is but a special manifestation of what we call conation; and this conation, this tendency to move beyond itself, we have reason to hold to be a general characteristic of all of consciousness. The real question, then, is whether the Self is free, and whether this freedom of the Self is compatible with the facts observed in connection with our recognized acts of will; or, in other words, is the Self free in willing?

On the one hand, this freedom is held to be evidenced (1) in our sense of freedom in making choice between

* *Essay*, etc., book II, chap. XXI, sec. 21.

alternatives and (2) in the very fact that we make such choice. On the other hand, the average mechanist tells us that there is no such freedom as is thus suggested, for, according to his view, if there were, it would appear that our acts contravene the laws of Nature, in conformity with which each act is determined as the effect of a given physical cause and hence is not free. He tells us that our impression of freedom to choose either one of two alternatives must be an illusion.

SEC. 2. It is to be noted at the start that we here deal with two problems which are often confused by both parties to the dispute, viz.: First, whether the Self is free in its acts; and, second, whether we could or could not have acted otherwise than we did act in any given instance. It is not at all evident that if we are compelled to hold that we could not have acted otherwise than we did we shall be compelled to deny the freedom of the Self in its willing. Let us consider these questions in their order.

SEC. 3. Certain philosophers have clouded the issue by speaking of man's freedom when they really refer to his creativeness, which we have considered in the preceding chapter. Some such view seems to be implied, for instance, where Kant argues that the fact of pure reason means that there is freedom, since freedom implies the initiation of an action in time in a way that is not entirely explicable in terms of preceding events in time.* But surely this is not what is in mind when we ask whether we could, or could not, have acted otherwise than we did; in either case, as we have seen, our creativeness would be involved. What we really mean when we speak of the Self as free is that it always acts in accord with its

* *Cf.* John Laird's *Problems of the Self*, p. 156.

own nature, such as this nature is at the moment of action.

Here we find value in the considerations of our preceding chapter, where we considered the meaning of law and of our governance by law. We perceive that in holding that our acts are governed by the laws of Nature the mechanist is really stating that the acts of the Self are such as force us to believe this Self to be part and parcel of Nature. And this notion we have seen to be eminently satisfactory; first, because we cannot without dismay look upon ourselves as stray waifs in this vast Universe; and especially because it means that the interpretation of Nature must include the interpretation of consciousness. And this covers these so-called acts of will, and our sense of freedom in connection with these acts.

If, then, it is true that the Self is part and parcel of Nature the mechanist can no more deny its freedom to act according to its own nature than he can deny a similar freedom to any reaction observed in the objective world; a freedom that he has no tendency to question. He never considers, for instance, that a chemical reaction of a certain specific form is indicative of anything but a free expression of the element's essential nature.

SEC. 4. One who thinks superficially may be inclined to say that even if we view the matter thus it is obvious that in many cases we find ourselves failing to do what apparently the nature of the Self would incline us to do. The paralytic may exert his will to move his arm without effect, and in this the freedom of his Self to act in accord with its own nature may seem to be denied. It is, of course, clear that one who raises this objection misses altogether the point at issue, which is not whether the re-

sults of its voluntary acts yield the hoped-for effects, but whether the Self in willing is free to act in accord with its own nature. Nevertheless it is worth while to note that the man's failure to gain his end in such cases is but a special case of the obstructions to his will found in Nature—one may will without limit to move mountains, but no movement follows—and to consider the bearing of this fact upon our problem.

When we recognize that we are obstructed in our willing by situations in Nature, we are dealing not with the Self but with an empirical ego that is but a simulacrum of the Self. Then, also, in thought we are isolating this ego not only from the Self, but also from Nature. We are considering the characteristics of what is really a minor system within the vastly complex system of Nature as though it was what it is quite apart from the whole complex system.

But the true nature of the Self can never be discovered in any such process of isolation. It never can be thus isolated in fact from Nature. Could we gain a full appreciation of what it is we should find the situation as we review it in reflection a misrepresentation of the Self, which must be what it is because of the whole situation in the great system of Nature of which great system it is a minor part. It must be what it is as it exists in correlation with all parts of Nature that affect it.

We do not think of the heart as anything but free to act in accord with its own nature at all times. It may act vigorously under some conditions, and less vigorously under others, these conditions being involved with the function it has to perform as a vital part of the organism. These conditions, due to some situation in the organism as a whole, may involve less vigorous action than the

heart would normally perform, and if we picture it as having a consciousness comparable with our own it might be inclined to say that it was obstructed and not free. But we see that the nature of the heart is what it is because it is part and parcel of the organic system, and that the conditions of this system are thus of the essence of its nature; and that it always acts in accord with its nature, whether it acts with or without vigor.

It thus appears that in this appreciation of obstruction by Nature we have but an indication of certain aspects, or characteristics, of the Self, and no indication whatever that the Self if completely comprehended would not appear to act in all cases in accord with its own nature, freely and without compulsion from the forces of Nature *as external to it.*

SEC. 5. When we turn to the second of the problems referred to in Section 2, we perceive that the fact that we feel that we make choice between alternatives is often taken to be evidence of the freedom of the Self. But when we ask whether we could, or could not, have acted otherwise than we did act, we find ourselves dealing with facts which, on their face, seem to suggest that the Self is indeed an existence apart from Nature, and not "governed by" its laws. For without question we have experiences which lead us to feel that our Selves acted in one way when they might as well have acted in another; and this stands in opposition to the view forced upon us by the observation of Nature that if a specific cause appears, a specific effect, and none other, must result.

And here it is that the mechanist is wont to feel justification for his opposition to the theory of the freedom of the will as he hears its advocates appeal to the experience of choice in its support; for, as President Arthur T.

Hadley says:* "From the standpoint of modern science this theory is little short of an absurdity."

SEC. 6. Let us consider the situation from another point of view. When we make a choice we look upon the Self as able to perform either act (*A*), or act (*B*) which is incompatible with (*A*). But if a Self, being free to act in accord with its own nature, did in a given moment perform act (*A*), then evidently it could not in that same moment have performed act (*B*), while still remaining free to act in accord with its own nature; for if the Self, remaining the same Self, could at this given moment have performed act (*B*) it would not have acted in accord with its nature, as indicated by the performance of the act (*A*), and it would therefore have acted without freedom.

We thus see that there is full justification for the position of the mechanist who holds that the sense of ability to choose between alternatives is an illusion. I think it more in accord with the facts, however, to state the matter differently; to ask ourselves for an explanation in psychological terms of the indubitable fact that we feel that we are free to choose either one of two alternatives.

SEC. 7. In the first place, we may remark that the opponent of the mechanist cannot justly claim support for his position in the fact that we experience a sense of freedom in connection with such choices; for we should have experienced the same sense of freedom had we performed act (*B*) rather than act (*A*). This sense of freedom is the accompaniment of the relief from the hesitancy antecedent to the choice, and would exist whichever of the two incompatibles was chosen.

The key to the solution of this problem is, however, not

* *Responsibility and Freedom*, p. 69.

far to seek. It is discovered when we consider that when we find ourselves appreciating this freedom to choose either one of two incompatible alternatives we are dealing with a reflective state in which we have under consideration, not the Self which is non-presentable but the simulacrum of the Self, the empirical ego. What we have before us in such cases is the conception of a single ego that might have performed either act (*A*) or act (*B*).

But we do not conceive of the ego as performing these diverse acts both at once in one moment, we separate them in time; and as the ego, as we have seen, is always new and unique, we are thus really considering two empirical egos performing diverse acts.

The difficulty appears to arise from our assumption that the two empirical egos are one and the same; but this assumption, natural as it is, we have seen in a previous chapter to be unwarranted. And quite apart from the evidence there given to show that each ego must be new and unique, it seems clear that such egos as we are here describing must be altogether diverse in the very fact that, if practically the same mental object is given to them, each tends to act differently upon the object. As one of these empirical egos is about to act upon the given mental object by the emphasis of certain of its elements, its action is inhibited by the appearance of the other empirical ego which tends to act upon the mental object by the emphasis of quite incompatible elements. Finally one of these diverse empirical egos does act—*i. e.*, becomes effective—and then in the act of will the deadlock is broken.

We then look back in retrospect and see the two empirical egos in contrast, and we realize that one of them did act in a certain way, and if the other had acted it

would have acted in a quite incompatible way. Then we fall back upon our every-day assumption that the two egos were the same and identical, and thinking thus we come to hold that this supposedly one ego could have acted in either one of two ways. These diverse egos may have, and usually do have, many elements in common, but that they are appreciated to be distinct egos cannot be doubted. We actually often think of them as standing over against one another, as when we look back at the act we chose and with regret attribute it to a "worse self" in comparison with the "better self" that did not maintain itself at the time, but which is maintained in the moment of repentance.

SEC. 8. It would thus appear that neither our sense of freedom in making a choice, nor the fact that we think of ourselves as being able to choose what we did not choose, can be held to establish the view that the Self is free in its willing.

On the other hand, however, the very facts presented by the mechanist in opposition to this freedom of the Self to act in accord with its own nature tell in favor of such freedom. For careful analysis of the conceptions of Nature accepted by the mechanist, and upon which he bases his opposition, involves the view that each elementary part of the physical world is free to act in accord with its own special nature, and must indeed so act. Indeed, it would appear to the scientist to be mere nonsense to speak of the possibility of any other mode of action in Nature except one that is free in this sense, which is the only sense in which the freedom of the Self can have any moral significance.

But, as we have seen, the very contention that our Selves are "governed by" the laws of Nature, implies

that they are part and parcel of Nature; that no interpretation of Nature can be satisfactory which overlooks the existence of Selves with their characteristics as observed in psychological inquiry. And if this is true, then the freedom to act in accord with its own nature that is attributed to each elemental part of Nature must be attributed to the Selves that are individual parts of it.

B

SEC. 9. The analysis in the preceding sections enables us to deal with the problem raised at the close of Chapter III, but then reserved for later discussion. We had there noted that all rational acts are volitional, and were naturally inclined to hold that the converse must be true, viz., that our volitional acts are always rational. For the control by the Self, as known to us in the control by the empirical ego, is appreciated only where adaptation is called for. And, as we have seen, all adaptive acts are of the nature of rational acts, although not always clearly defined as such. It would thus appear that we never act voluntarily and at the same time irrationally.

The defense of this position involves the maintenance of the view that even where a man is considered to have erred or to have sinned he must have acted rationally. Upon the conviction of the truth of this notion was based the contention of Socrates that sin is solely due to ignorance.

Now this tenet seems upon a superficial view to fly in the face of the experience of every man; for each of us realizes that he has often erred and sinned, and this seems to mean that in cases of error and of sin we willed what was irrational.

Yet how can one agree to this without disturbance of

mind, while still upholding the freedom of the Self? For if it be true that the Self wills irrationally, and if that Self is free, and if this freedom involves action in accord with its essential nature, then evidently a Self may, under certain conditions, be irrational in its essential nature.

Such a view cannot be pleasing to any of us. Nor can it appeal to the psychologist who agrees that the natural outcome of the process of reasoning is a volitional act; and that the antecedent to the volitional act always appears to be implicitly of the general form which becomes explicit in clearly defined ratiocinative process.

If we are to avoid such an unsatisfactory conclusion, therefore, we must be prepared to uphold the tenet that all volitional acts are necessarily rational acts *at the moment of their occurrence;* and this certainly can mean nothing else than that we in our self-conscious states never do, in fact, act voluntarily and at the same time irrationally; *i. e.*, that we never do actually err or sin.

SEC. 10. Strange as this statement may sound to some readers it would seem that it must be held to be true; but I hasten to add that this assertion contains no denial of the fact that we recognize that we *have* sinned or *have* erred.

It is perfectly true that if we hold that the Self as represented by the empirical ego is a persistent entity, it is impossible to assert that a Self can never act voluntarily, and at the same time irrationally, without having our assertion combated by the clear consciousness of our own sins and errors. But, if we agree that each Self at each moment is new and unique, and that each empirical ego at each moment is new and unique, then we do not find the least difficulty in harmonizing this assertion with our experience. For we are able to explain that the em-

pirical ego always, in acting voluntarily, acts also rationally; but that nevertheless an empirical ego, or an imaged self, may be recalled which in acting freely and rationally acted in a manner which would be irrational for the Self, or for the empirical ego, *of the moment in which this recall occurs*. We merely assert, then, that the recognitions of error and sin are recognitions of what is past; are due to a comparison of the acts of a past Self, which are represented in reflection by the acts of an empirical ego of a diverse nature from the Self, and from the empirical ego, of the moment of reflection; of a past empirical ego which at the moment of its existence, freely and rationally, willed an act which the diverse empirical ego of the moment of comparison, in its freedom, could not will; and thus it is that we recognize that we *have erred* and *have sinned;* that we *have acted* in a manner which, if we could now act thus, would be irrational and not in accord with the nature of the empirical ego of the moment, nor in accord with the nature of the Self of the moment as this Self is conceived. That we realize this is seen in the fact that we attribute the act of sin to what we call our "worse self."

When we look forward and say that if we act in a certain way we shall err or sin, the process is fundamentally the same; for then we picture to ourselves a future Self acting freely in accordance with its own nature, but in a manner that would be irrational for the Self of the moment of comparison, *i. e.*, in a manner that would involve this present Self's acting in contradiction with its own essential nature.

Under such a view this whole difficulty turns upon the fact that the notion of wilful erring and sinning is an illusion due to our inveterate bad habit of dealing with ret-

rospective and anticipated acts as if they were occurring in the present moment. When we seem to catch ourselves in the act of sinning, or erring in the broader sense, we overlook the rapid transition between the actual rational experience in the act and the experience of having acted, or of imagining ourselves acting.

In closing this special discussion one point of moment in relation to our moral life is to be noted. If it were true that we actually experience the Self as acting irrationally—as erring or sinning voluntarily—we should be dealing with a Self that is in bondage, and not with a free Self. In such case this experience would have no moral significance. It is the recognition that we *have sinned* that induces the repentance in which lies our hope of moral regeneration.

II. *Responsibility**

SEC. 11. One of the most marked characteristics of our free Selves, as they are conceived, is their responsibility. And if it is true that the Self is always free to act in accord with its own nature, it would seem that responsibility must apply to all of our acts, and that there can be no such thing as irresponsibility. It would appear that we cannot deny this without also denying the freedom of the Self.

But that this clear deduction from the postulate of the freedom of the Self is not accepted as valid is clear in the uncertainty with which we commonly make this attribution of responsibility. Where our acts turn out well, or are generally praised, we usually gladly accept the re-

* This division of this chapter is republished, with some minor changes, from the *Philosophical Review* of September, 1914.

sponsibility for what occurred; but when they turn out badly or are generally discredited, even the best of us feels a tendency to look elsewhere for this responsibility than to his own Self, he tends to shift the responsibility onto the shoulders of others, as we say.

Again, in our action toward the very young we display this uncertainty in marked degree. We assume that at a certain period of development the child suddenly becomes responsible for his acts, but that previous to that period he was irresponsible. We are, however, altogether without any clear idea as to the moment when this responsibility appears, or as to any signs of the distinction between the two conditions. We may as well be honest and acknowledge that, as a matter of fact, we make up our minds whether we shall blame, or fail to blame, children for certain harmful acts; and then, in order to maintain the sense of our rationality, hold that this blame is distributed only to those who have reached the age when responsibility can be attributed to them.

So, again, we agree that there is no possibility of making a sharp distinction between the sane and the insane; that the so-called insane are merely those who display in abnormal development characteristics that all men display in some measure, and that no living man is without some minor or major abnormal development of such characteristics. Nevertheless, we often fail to punish the most vicious of mankind because we hold them to be victims of insanity and hence irresponsible; and yet it is through the observation of just such cases that we conclude that no clearly marked line between sanity and insanity is discoverable. Moreover, there is no ground whatever for holding that responsibility goes with the former and not with the latter. As a matter of fact, our

court records show that here again we make up our minds whether we wish to, or do not wish to, punish a given criminal, and then attempt to cover our tracks and maintain an appearance of rational consistency by claiming that he is, or is not, sane as the case may be; holding that if he is sane he is to be held responsible for his criminal acts, but that if he is insane he is not to be so held.

SEC. 12. These difficulties lead us to inquire as to the real meaning of the conception of responsibility, and in the beginning to ask what the average intelligent man understands by the word.

In looking for an answer to this question we naturally turn to the dictionary definitions, and there we at once find evidence that the current usage of the word is determined almost entirely by legal applications. Responsibility is very generally defined as the equivalent of accountability. A man is held to be responsible for a debt, or for an act, when he may be held accountable for the payment of what he has borrowed, or for the results of his act.

Now accountability is a matter which is largely determined by expediency. Whether I shall be accountable for my debt depends upon the wish of the man who loaned me the money, and upon the conditions under which the loan was made. Whether I shall be accountable for the results of my act depends upon the will of judges and jurors. Thus accountability varies greatly with the circumstances under which the debt was incurred, or the deed was performed, and upon those which exist when judgment is passed. But we certainly cannot be content to agree that any conception of responsibility that has ethical significance can be based upon relations to expediency, and we are thus tempted to ask whether, by any

chance, the definition of responsibility in terms of accountability can be an adequate one.

This questioning is emphasized when we observe our own inner experiences of the "sense" of responsibility, which no one can claim to be identifiable with our appreciation of accountability, or to have any relation to expediency. We often feel a deep sense of responsibility when we have no possible ground for fear that we may be held accountable for the deeds referred to. We assume responsibilities which are in no sense dictated by tradition, custom, or law.

Furthermore, we find certain instances where responsibility, even as objectively viewed, cannot be identifiable with accountability. Take, for example, the case of the skilled mountaineer who leads the novice to his death. He is not held to be guilty, just because we can find no ground for holding him accountable. And yet we are likely to say that we hold him responsible, thereby showing distinctly that our conception of responsibility is distinct from that of accountability.

We note, further, that the difficulties above referred to in relation to the determination of the responsibility of the child, and of the so-called insane, arise in all cases in connection with attempts to determine the limits of accountability, and are frequently decided on grounds of mere expediency; this suggesting that these difficulties may arise just because we assume that responsibility means accountability, when really it does not.

All this leads us to note again that this identification of responsibility and accountability is one that has its especial significance in legal procedure, which, in turn, suggests the thought that this connection between the two may possibly be due merely to the habitual use of the terms

in conjunction and not to any real interdependence. May it not be that, as these conceptions have developed, we have come to think of responsibility and accountability as equivalents because those whose usage has fixed the definition have given their attention to the determination of responsibility only when they have been concerned to determine questions of accountability?

SEC. 13. It becomes clear upon examination that the conception of responsibility held by the average intelligent man in our day involves the notion that the man who is now thought to be responsible for the crime is the same individual man who committed it in the past, and who is therefore likely to commit it again in the future. But it seems evident that this mere notion of identification does not in itself involve the conception of accountability; although it is equally evident that, as man developed, and as his modes of procedure became less immediate and direct, questions as to accountability and guilt would soon become intimately connected with questions as to identification.

This very fact, then, that the notion of identification, which was probably primary, is at all events still implicit in the conception of responsibility, should lead us to see that the fundamental notion upon which the conception is based is not that of accountability at all, but is that of *authorship*. This becomes the clearer when we note that the moral significance of the conception of responsibility has no direct relation with the notion of accountability, while it has everything to do with the notion of authorship.

SEC. 14. It is important, then, for us to consider the implications of the notion of authorship as applied in the building up of the conception of responsibility. In hold-

ing that a man should be punished because he was the author of a crime, we really hold that, were the situation incidental to the crime repeated, the accused man of this moment would act, practically, as he did in the moment of the crime. And this position is taken because of our conviction that the man's character in any moment is to be judged by the nature of his character as displayed in his past acts; this, again, meaning that the man before us would not be what he now is had not an individual of a certain character capable of the crime existed in connection with the man's body at the time of his act of the past.

But evidently we are here dealing with a general principle, and not merely with the particular criminal act. What we are really acknowledging in this isolated judgment is that the individual man of any moment would not be what he is in that moment but for the previous existence in connection with his body of *all* the characteristics which in the past have led to *all* the special modes of his behavior with which his fellow men are acquainted.

This broader implication is indeed not generally appreciated, but it is really accepted in a number of our modes of criminal procedure. We commonly hold, for instance, that if a man would have been properly punished at the very moment of a criminal act, he is properly punished at a future time, long after its commission; thus tacitly acknowledging that the man's present nature is what it is because of the previous existence in connection with his body of all the characteristics which have led to all of his past activities. And we make this same acknowledgment where in judging of a man's responsibility we take into account his general character, aiming thus to discover the kind of person the accused man generally is,

and therefore now is. This, of course, means that we base our judgment not only upon the evidence we have of his exceptional criminal act, but also upon the assumption that he would not be what he now is but for the previous existence in connection with his body of all the characteristics that he has in the past expressed by all of his acts, and not merely of those characteristics evidenced by the exceptional criminal act.

SEC. 15. We are thus led by clearly defined steps to a conclusion of broad import, which stands opposed to a large body of current opinion; for evidently the proposition upon which the conception of responsibility is thus held to depend is not one that can be limited to have reference to only some of a man's activities. As there is no case in which a man's present nature is not developed from his past nature, there can be no case in which a man's present nature does not bear in it the traces of his past acts, and therefore no case where a man's present nature is not what it is largely because of characteristics which under given conditions made his past acts what they were. It is little less than absurd to say that a man who has done a certain deed is not now a different man than he would have been had he not done that deed; and that a just judgment of his present character can be made without recognition of the fact that he acted as he did in the past.

Very evidently, then, if we agree that the essence of the notion of responsibility lies in the recognition of the fact that a man would not be the individual he is at any given moment but for all his past activities, we must also agree that he is always responsible for all his activities; or, in other words, that we are justified in holding that *there is no such thing as irresponsibility.*

SEC. 16. This result of our study will without doubt appear not only radical, but repugnant to many who are accustomed to gain satisfaction in the assumption that they are not responsible for a large proportion of their acts. Yet upon consideration it becomes evident that just such a conception is of necessity tacitly involved in all ethical theory worthy of consideration. For it is difficult to see how any treatment of human character and human behavior can lay claim to rational consistency which accepts a theory that we are at times responsible and at other times irresponsible, without being able to define clearly the distinction between the two situations involved; and this we have seen to be impossible.

The position we have reached is also tacitly assumed by all of us in what we may call the practical ethics adopted in our guidance of the young. Whether a child is, or is not, to be held responsible under given conditions may be a subject of discussion among his guardians; but we all realize that if we would foster his moral growth, it is the worst of folly to allow him to gain the belief that he ever can be irresponsible.

And yet it is evident that one cannot expect such a view to be accepted without hesitation; for if we agree that we are responsible for all our acts we must make no little change in our habitual attitude in relation to our deeds. For then we can no longer claim responsibility for those acts which are applauded by our fellows while denying it for such as yield deplorable results, as we are so often inclined to do. We can no longer attempt to shift the responsibility for certain of our acts upon others who may have influenced our lives by example or teaching; those who have thus guided us must be held to be responsible for such guidance; but we must accept respon-

sibility none the less for our willingness to be guided, and for the acts which follow. Nor can we longer claim irresponsibility for activities which are due to habits acquired voluntarily, or which are encouraged by those to whom we look for guidance; no, nor even for those actions which are apparently automatic, as we say, and largely due to inherited traits.

SEC. 17. This last point indeed presents special difficulties which must be considered in detail; but before undertaking this it will be well to turn for a moment to the study of the relation that is generally supposed to hold between responsibility and guilt.

It is usually assumed that these two conceptions are co-ordinate and inseparably connected; an assumption which cannot be made, however, unless we overlook the very patent fact that responsibility has a broader application than guilt.

In the first place, guilt relates only to such of our acts as yield evil results; while responsibility is held to apply to deeds which yield good results as well as to those which yield evil. No one hesitates to attribute to Lincoln the responsibility for the emancipation of the slaves, even as no one hesitates to attribute to Wilkes Booth the responsibility for Lincoln's untimely death.

And, in passing, it may be noted that, this being the case with responsibility, it would seem that irresponsibility, if there be such a thing, ought also to be held to apply as fully to good deeds as to those that result in evil. But here we find men less in agreement. They are ever ready to claim irresponsibility for deeds that are followed by misfortune or disaster; but seldom willing to deny responsibility for those that yield good fortune and benefit to others. We are relatively firm in our application of

responsibility, but vacillating in our application of irresponsibility.

The fact that we apply guilt to a range of our activities much narrower than that to which we apply responsibility becomes still clearer in the fact that guilt is very generally held to relate only to those acts yielding evil results that appear to be unquestionably volitional; while responsibility is not infrequently applied to such acts even when they are not felt to be in any sense voluntary. No one could properly claim, for instance, that the act of self-protection which leads a man to push forward in a panic, and to forget his neighbor's danger, is volitional in its nature; nevertheless we commonly hold the man responsible for his act, although we do not hold him guilty.

But, notwithstanding this patent evidence that responsibility has a wider range of applicability than guilt, we find ourselves so very generally attributing guilt to the man whom we think of as responsible for evil, that we are led to disregard this difference; and it is because we do so that we take the position that guilt is inapplicable where, as is claimed, the culprit is irresponsible. We apply both guilt and responsibility to the man who intentionally initiates evil deeds with the knowledge of their outcome; and are then led to hold that, if he is irresponsible he is not guilty, even though he appears to have acted voluntarily, and with full appreciation of the probable result of his acts. Hence arise those cases where the plea of insanity is made in order to show irresponsibility, although it is acknowledged that the culprit fully intended the evil result that followed his act.

If, then, guilt is never felt to apply unless responsibility also applies, and if the range of applicability of responsibility is greater than that of guilt, guilt would appear to

be a special case of responsibility. And when we ask what may be the special mark which distinguishes the responsibility of guilt from all other forms of responsibility, our attention is turned again to the conception of accountability which is so generally thought to be the equivalent of responsibility. And this leads us to note that while responsibility, as we have seen, is not necessarily connected with accountability, guilt is thus necessarily connected; for we do not attribute guilt to a man unless we agree that he is to be held accountable for his evil deed. This at once suggests that the mark which distinguishes the responsibility of guilt is to be found in the fact that accountability is necessarily attached to guilt, and not necessarily to other forms of responsibility.

It would appear, then, that while responsibility is not, guilt is, determined by accountability; and we seem thus to be justified in our suspicion that the assumed relation between responsibility and accountability is an adventitious one, which has become fixed in our minds by the fact that we seldom give attentive thought to the conception of responsibility unless we are concerned to determine whether a man is accountable, and may therefore be held to be guilty. The connection which is also so generally assumed to exist between guilt and responsibility would thus in its turn appear to be an adventitious one, due to our carelessness of thought.

Evidently, then, if responsibility applies to all of our acts and there is no such thing as irresponsibility, all questions as to the dependence of guilt upon responsibility at once appear to be purely academic. For whether a man is, or is not, guilty in regard to a special act, he nevertheless, under our view, is responsible in the one case as in the other, wherever his causal efficiency is involved.

The supposed relation of responsibility to guilt appears, therefore, to be altogether irrelevant in regard to questions which arise in connection with the attribution of guilt.

SEC. 18. We may now return to the consideration of the difficulty above referred to in reference to the claim that responsibility applies to what we call our "automatic" acts, and to those due to inheritance.

A reader may perhaps express this in terms of some such question as this: "Do you really mean to maintain that a woman who kills her babe in the mania accompanying puerperal fever is responsible for her act?" And to such a question I must of course, in consistency, make an affirmative reply; but I would beg my questioner to note that if this affirmation seems repugnant to him it is only because of the very close connection in his mind between guilt and responsibility, which we have just seen to be one of accidental association only. For I would ask him to observe that when he put this question he did not really mean to ask whether I should hold the woman to be responsible, but rather whether I should hold her to be guilty; and to that question I should, of course, give a negative reply.

The point I would make is this: That as the poor woman's nature at the time of the killing must have been what it was because it bore in it the marks of all the acts of her previous life, so her future character must be based in part, but in this case in very small part, upon her nature as displayed in her maniacal act. We acknowledge this, indeed, when we take precautions to prevent the woman from repeating her murderous act when next she bears a child. This relation of her maniacal act to her character, as it existed immediately after the act in

question, involves the relation of her authorship to her present nature; and this, as we have contended, is of the essence of her responsibility, although it bears but a minor and indefinite relation to the question as to her possible guilt.

SEC. 19. But the most important direction in which this conception of the meaning of responsibility clashes with our every-day views is presented when we note that if there is no such thing as irresponsibility, then we must be responsible not only for those acts that are volitional, but also for those that are called instinctive. One might say: "If you take such a position you are bound in consistency to hold that I am responsible, not only for my deliberate acts, but even for such activities as the winking of my eyelids; and this surely is a *reductio ad absurdum* of your thesis."

This I am not prepared to acknowledge, although I agree that there is justification for forcing the issue. And I would suggest that we are more likely to discover the truth if we think at first of certain intermediate cases, instead of leaping from those that are distinctly characterized by volitional control to those where this control appears to be entirely lacking, as in the case of the winking eyelid. When we do so we find that, while the average man does not often apply responsibility to cases of instinctive activity that seem beyond control, he sometimes does. We think of the coward, who flees for his life when a grizzly pounces upon him and his companion, as responsible for the death of the man he deserts; although the coward would without doubt say that his act of running was purely instinctive and quite beyond his control. So, again, we apply responsibility to the low negro who commits rape; although, if he were intelligent

enough, he would without doubt claim that he was overwhelmed by uncontrollable instinctive passion.

Cases of this nature show that we do in fact apply responsibility to certain instinctive acts determined by heredity; and an effective objection cannot be made to the view that responsibility must apply to all forms of activity, whether volitional or instinctive, unless some radical distinction can be made between such cases and the extreme case of the winking eyelids. But no such distinction can be found, and the point I would make is greatly strengthened by the fact that few if any of us hesitate to accept responsibility for instinctive acts if the results are looked upon as praiseworthy. In fact, it appears that men disclaim responsibility for their instinctive acts only in case they are ashamed of them; or where, as in the case of the winking eyelid, they are unaware of them.

The main basis of the difficulty we have in accepting responsibility for our instinctive acts is found in the confusion between the conceptions of accountability and of responsibility spoken of above. You are not to be held accountable for the winking of your eyelids, and therefore you without justification say you are not responsible for this winking.

But this difficulty is also partly due to our failure to realize that these instinctive acts have much to do with the nature of a man's character. So far as they are common to all men, as they are in the case of the winking eyelid, they merely go to make part of a broad background against which appear the differentiations which make the characters of different men distinctive. But we are compelled to agree that they are essential elements in the determination of the character of a special man

as soon as we note that they are held to contribute to its special nature, and are thought to involve the man's responsibility, whenever they are abnormally developed or undeveloped and thus appear important in making him a distinctive individual. The man whose instinctive sexual passions are abnormally developed is given thereby a special character which is thought to involve his responsibility. The man whose instinctive digestive activities do not function properly gains a special type of character in extreme depression of spirits, and is usually thought of as responsible for the acts attendant upon this condition of morbid melancholy.

Under the view here maintained the conception of responsibility is based upon the fact that each act of a man, of every kind, has its part in the making of his character as it exists after the act, and therefore goes to determine what his future acts will be. As it is his whole character that is involved with his responsibility, all of his instinctive acts—even his eyelid activities—must be taken into account, *so far as they make his character distinctive as that of a special individual.* But evidently although such instinctive activities as those of the winking eyelid have something to say as to the nature of the character of any individual man, they as evidently are of minutely small importance in relation to his distinctive individuality, and may therefore in practice be entirely overlooked in our judgment as to the application of responsibility; as indeed they usually are.

SEC. 20. But, after all, it may be asked, if we are beset by difficulties in determining the propriety of punishment, and the justification for the attribution of guilt in connection with our assumption that there are varying grades of responsibility, and even cases where a man is

totally irresponsible; do we gain anything by adopting the thesis you suggest? Will not all these difficulties remain with us in another form, even if we agree that there is no such thing as irresponsibility?

That the problems which now confront us would remain cannot be doubted. On the other hand, it seems clear that we should be prepared to treat them in a more intelligent manner than is possible so long as we claim the right to evade their solution by falling back upon the elusive distinction between responsibility and irresponsibility, and the illusive assumption of irresponsibility.

Problems in relation to the attribution of guilt would still present themselves, but they would cease to extend beyond the determination of fact. We should still have difficulties in deciding whether a man foresaw the evil results of his act, and carried it to fruition volitionally, and was therefore accountable for it, and hence guilty; but such difficulties would be more easily solved if we faced them than if we confused them, as we now do, with questions as to his responsibility for his act.

Problems in relation to punishment would still remain; but in regard to them all questions as to responsibility would be seen to be irrelevant, and their solution would be sought by methods which could be closely scrutinized and subjected to rational treatment. For having become convinced that a man was accountable for a given evil act, and hence guilty, our judgment as to the propriety of his punishment would be determined by reference to clearly defined principles. We should not be tempted, as we now are in our questionings as to responsibility, to overlook the fact that punishment can only be justified, and is fully justified, if it appears to be likely to lead to results of benefit to individual members of the commu-

nity, or to the community at large; of course including under these benefits such salutary effects as we may hope to produce in the criminal himself considered as a constituent member of the community.

We should thus find ground for the discipline of the destructive child who is innocent of evil intent, as well as for the punishment of those whom we hold to have been culpably negligent. For, in the one case as in the other, without any reference whatever to the question of responsibility, we should aim to warn the individual against certain harmful activities the evil of which he would not otherwise realize.

We should also avoid all those futile discussions which finally lead us to refrain from punishing a clearly proven murderer who is held to be irresponsible; for we should then be able to justify his punishment on the ground that it is necessary to the protection of the community.

On the other hand, if all questions of responsibility were treated as irrelevant in relation to the attribution of guilt and the administering of punishment, we should find warrant for leniency when we discover that the man who has been guilty of crime gives full evidence of complete reformation; and we should not be tempted to insist upon the punishment of a man for a serious crime which had not been discovered until long years after its commission, provided it appeared that during the interval he had reformed and was now leading an exemplary life.

SEC. 21. Turning to the special problems which have appeared in the course of our discussion, we may note at the start that, if we adopt the view I am maintaining, we avoid the difficulty connected with the futile attempt to draw a line of distinction between responsibility and irresponsibility. Differences of opinion as to the respon-

sibility of the child would thus disappear, for we should hold that the child is responsible from birth and should explain to those who are repelled by such a view that this repulsion arises merely because they have become so completely accustomed to think of guilt and punishment as necessarily correlated with responsibility. The disgraceful wrangles in our courts as to the sanity or insanity of the murderer would also cease; for if no man can ever be irresponsible, then we must agree that the murderer was responsible, whether we show him to have been what we, for our convenience, call sane or insane. The problem laid before the courts would then be one in connection with which questions as to responsibility and irresponsibility, sanity and insanity, would evidently be quite irrelevant. The jury would be asked merely to determine questions of fact as to the commission of the crime and the intention of the criminal. These being settled, it would remain to determine whether the criminal is, or is not, a person of weak intelligence and self-control; and whether his act was due to an unusual temptation which is not likely to be repeated. It would then be a relatively simple matter to decide upon the best mode of procedure looking to the protection and advancement of the community, or to the reform of the criminal as a member of the community.

SEC. 22. In closing we may consider one of the difficulties met with in connection with the view that a necessary correlation exists between responsibility and punishment, which has led to the current notion that, if punishment is entirely remitted in the granting of full forgiveness, all burden, not only of guilt, but also of responsibility, is removed, a notion which is, of course, unwarranted under the view I am maintaining. For no remis-

sion of punishment can take from the fact that the man's present character is what it is partly because of his sinful act of the past; and this means that his responsibility for that act remains, notwithstanding the forgiveness. This, however, is entirely lost sight of by the average reformer, and by the average criminal to whom forgiveness is granted; and in the feeling that all responsibility for his past sinful act is obliterated when he is forgiven we have one of the greatest difficulties connected with the regeneration of the criminal who tends to become a backslider; for the entertainment of this notion leads the culprit to overlook the fact that there is imminent danger that the characteristics of his past self which led to his crime may again become dominant.

No one will question the fact that it is of the greatest value to the repentant man to feel that in the forgiveness which follows repentance the burden of sin is cast off, this value being due to the fact that in connection with it the repentant man is given courage to lead a new and better life. But if this is held to carry with it removal of all responsibility for the past sinful act, it clearly tends to place the reformed man off his guard and is often instrumental in producing a relapse into his old evil ways.

If it were impressed upon him that responsibility remains, notwithstanding that forgiveness has been granted, he would realize that he still holds in his nature the capacities which in the past led to the evil act, and would be more likely to remain constantly on his guard lest his old self might again gain the mastery.

SEC. 23. It may be well for us at this stage of our thought to summarize the salient points made thus far in our study.

I

Each situation in consciousness involves a special and specific mode of human behavior.

Each mode of human conduct has correspondent with it a special and specific situation in consciousness.

The noetic and neururgic correspondence appears to be thoroughgoing.

II

All behavior is influenced 1 by past situations as these are related to the present, and 2 by situations in the present as these relate to the future. This yields two aspects, *A* and *B*, in connection with each act. *A*. Where condition 1 is emphasized, and condition 2 is overlooked, we call the act instinctive. *B*. Where condition 2 is emphasized and condition 1 is overlooked, we call the act adaptive. All behavior displays a unity of process.

Corresponding to these behavior situations we have given in consciousness as presentations to the Self, in case *A*, what we call "instinct-feelings," of which emotions and intuitions are special forms; and in case *B* intelligence and reasoning. All situations in consciousness display a unity of process.

III

The special forms of behavior that are observable are emphases of activity within an all-active complex physical system, and appear as such emphases in contrast with the undifferentiated mass of unemphatic activities.

Correspondingly what we call our "presentations" given in attention are psychic emphases within the whole

complex psychic system of consciousness, and appear as presentations in contrast with the undifferentiated unemphatic psychic mass which is a something more of consciousness. In any moment this "something more of consciousness" is the Self to which the presentations are given.

The Self cannot be a presentation. The ego of self-consciousness is a presentation and therefore cannot be the Self of the moment. It is, however, the image of a Self; a simulacrum of a Self, from the observation of which the general nature of the Self may be judged.

Our presentations are constantly changing. As there is a unity of process in consciousness, it follows that the Self must be constantly changing. Of this we find evidence when we study the nature of the ego of self-consciousness which is a simulacrum of the Self.

The Self controls, and thus defines the nature of the whole of consciousness of any moment; of what is presented and of what is not. This is evidenced in the control exercised by the ego, the simulacrum of the Self; in states of self-consciousness.

IV

Creativeness is a physical as well as a psychical fact. It is a characteristic of all behavior, and of all of consciousness, inclusive of the Self.

V

The Self is free to act in accord with its own nature. The fact that we choose between alternatives is due to the creativeness inherent in the free Self. The notion

that we could have chosen the alternative we did not choose, if true, would separate us from Nature. It is a misinterpretation of experience due to the appearance in reflection of two diverse egos, each of which would have chosen diverse alternatives; these egos appearing to be the same and being incorrectly assumed to be one and identical.

We never voluntarily choose what appears at the moment to be the irrational. If we did we should not be free Selves. We never err or sin. But, we recognize in reflection that we *have erred* and *have sinned,* or that we are *about to err,* or *about to sin;* and it is this recognition which is the significant experience in relation to conduct.

We are always responsible for all our acts. There is no such thing as irresponsibility. The notion that there is arises from our definition of responsibility in terms of accountability rather than in terms of authorship, in which latter direction alone has the notion of responsibility any ethical significance.

PART III

GUIDES TO CONDUCT

CHAPTER VI

PLEASURE AND PAIN

SEC. 1. Herbert Spencer* defines pleasure as "a feeling which we seek to bring into consciousness and to retain there"; and pain as "a feeling which we seek to get out of consciousness and to keep out." He thus describes situations that are familiar to all of us.

If we think of an act to which the idea of pleasure is firmly attached, we naturally tend to such behavior as looks to the realization of the act thus imaged, aiming thus to get into consciousness, and to keep there, the mental state that accompanies the act with the pleasure that will go with it. I, who am fond of sweets, see before me a box of bonbons. The thought comes to mind of eating one of them with pleasure, and I at once tend to take a piece and to put it in my mouth; and when the pleasant sweet taste is once given I roll the bonbon over and over with my tongue in order that the pleasant sense of sweetness may be maintained. The attainment of pleasure thus appears as a motive to certain forms of conduct.

Similarly of pain. I lose a filling from one of my teeth, and I know it should receive immediate attention. But the idea of the pain I shall suffer in the dentist's chair leads me to postpone an appointment with him. The thought of the avoidance of pain thus also appears as a motive to certain forms of conduct.

It will aid us in the consideration of these guides to conduct if we study such of the characteristics of plea-

* *Principles of Psychology*, I, chap. IX.

sure and pain as are pertinent to our inquiry. For a detailed consideration of this subject I may perhaps be allowed to refer the reader to my *Pain, Pleasure, and Æsthetics.**

SEC. 2. In the first place it is to be noted that pleasure and pain are essentially correlated; the former leads to efforts toward, and the latter to efforts away from, the attainment of certain ends. But beyond that they appear as contradictory opposites, for the existence of the one in connection with any given mental item precludes the existence of the other in connection with the same mental item at the same time. A given sensation, as of heat, for instance, may at one time be pleasant and at another time painful; but it cannot be both pleasant and painful at the same time. It is true that we may experience mixed states of pleasure and of pain, but in such cases the pleasure is attached to certain mental items that are appreciated as separate and different from those to which the pain is attached.

SEC. 3. The correlation between pleasure and pain is of a special nature. If a given mental item that is pleasant is maintained in attention, the pleasure gradually diminishes until it disappears altogether in a state which we speak of as indifference. If, then, the mental item is still maintained in attention the indifference is replaced

* Certain psychologists in our day would separate the "physical pains"—*e. g.*, cutting pains—from disagreeableness, and ask us to apply the term pain to "physical pains" only. This the common man does not do. He looks upon pain as clearly marked and emphatic disagreeableness; or, to put it in the obverse way, he looks upon disagreeableness as diffused and moderate pain. In this I agree with him, for reasons presented in the above-mentioned work. The reader who holds to the contrary opinion must note that I use the word pain, in accord with common and I think legitimate usage, to describe what he might call disagreeableness.

by a sense of disagreeableness which rapidly develops into a more positive pain, which latter increases in strength until both it and the mental item to which it was attached disappear as matters attended to. The evanescence of pleasure is generally recognized; so generally, indeed, that it is commonly urged upon our attention by the chronic pessimist.

The pleasure-pain transition is in one direction only—from pleasure, through indifference, to pain; and not in the reverse direction from pain, through indifference, to pleasure.*

Taken in conjunction, these facts would seem to indicate that where pleasure is given something is used up in the physical parts whose activities correspond with the mental item concerned. Although our knowledge of the neururgic correspondent of consciousness is so incomplete that we can do little more than present tentative theories to account for the changes in consciousness, we find much aid in the comprehension of pleasure-pain phenomena if we accept the following working hypothesis.

When the activity of the nerve part that is the correlate of the experienced mental item involves the use of surplus stored energy, this mental item is characterized by *pleasure.*

When the stimulus to the nerve activity calls for the development of an amount of energy in the response that is not available, the corresponding mental item is characterized by *pain.*

When the energy involved in the stimulus is the equivalent of that given in the response, the mental item is

* Certain apparent exceptions to this rule are easily explained. See my *Pain, Pleasure, and Æsthetics*, pp. 252 *f.*

characterized by what is neither pleasure nor pain, and is said to display *indifference*.

SEC. 4. It thus appears that pain is in a sense primary and pleasure secondary; for the capacity to store surplus energy necessary to pleasure production would seem to be dependent for its development upon a previous condition of overstrain that would involve pain.*

If pain could be altogether avoided, with this would go the possibility of pleasure attainment; for it would mean that the organism was placed, or had placed itself, in such a position in relation to its environment that all its activities involved an equivalence between the energy involved in the stimulus and that involved in the response to this stimulus; in other words, in a position where its consciousness would display naught but indifference.

SEC. 5. We thus see that any mental item may, under the appropriate conditions, be either pleasant, or indifferent, or painful.

This means that the absence of pleasure does not involve the presence of pain, and that the absence of pain does not involve the presence of pleasure. Either

* *Cf.* my *Pain, Pleasure, and Æsthetics*, p. 210 *et al.* In all complex organisms the reaction of a special part to a stimulation is speedily followed by an increased supply of nourishment. As the process of control of the nutritive system is complex, a measure of time is required before this supply is given, as is evidenced in the rapid failure of efficiency where the stimulation is sudden and extreme. In like manner, if an extreme stimulation calling for a large nutritive supply suddenly ceases, a measure of time will be required before the surplus supply of nutriment will be cut off, so that if the cessation of reaction is maintained the organic parts will gain a stored surplus of energy. The capacity to store surplus energy in a given part, upon which pleasure in the action of this part depends, would thus seem in turn to depend upon an antecedent hypernormal stimulation and imperfect reaction, and this will involve pain.

the one or the other may be displaced by indifference. Thus, so far as pleasure and pain can be looked upon as motives to conduct, we are dealing, not with two aspects of one motive, but with two distinct motives. It cannot be held that a life given to pleasure-getting will preclude pain; nor can it be held that the mere avoidance of pain will yield pleasure. In regard to the first point it is clear enough to the most careless of observers that one who yields himself to the fascinations of pleasure-getting soon finds his life filled with pain. But we all have a bad illogical habit which leads us to assume that if not-X yields a certain result Y, then X, the contradictory of not-X, will yield not-Y, the contradictory of Y; and in accord with this way of thinking we are wont to assume that if we can avoid pain we are bound to gain pleasure which is the contradictory opposite of pain.

Careful observation, however, of course shows us that there is little foundation for the notion that the mere avoidance of pain will yield pleasure. And this observation is well-founded; for if, as we have seen, pleasure capacity is based upon antecedent pain capacity, then the aim to attain mere absence of pain means really the aim to avoid all possibility of pleasure, and to sink into a life of mere indifference.

In any event, it is evident that if we hold that the absence of pain means the attainment of pleasure, and if then we make the avoidance of pain a motive, we are really using this avoidance as an indirect means to the attainment of pleasure, and our primary motive becomes identical with the motive distinctly recognized when we aim directly to gain pleasure.

SEC. 6. Still this avoidance of pain has been looked upon as a laudable motive by a certain group of stoical

philosophers, who have not considered the fact that the avoidance of pain by relapse into a life of indifference would mean the attainment of a passive state without influence upon the development of life. Of the two alternatives here referred to it is the aim to attain pleasure alone that involves the active life, and therefore the aim to avoid pain cannot be looked upon as having great significance in relation to conduct which has its importance in the accommodation to the conditions of life through active readjustments.

Notwithstanding all this, the prominence of pain in our lives, through frustrations of many and varied forms* resulting, for instance, from disease and poverty, and from the death of those upon whom we depend for sympathy and help, has ever presented a problem which has led to the emphasis of the notion that the avoidance of pain may well be made a valuable motive to conduct. It seems to me that these frustrations, and the pains they involve, appear in a very different light if they are viewed from the standpoint we are maintaining.

SEC. 7. In our day scientific observations are enforcing the view that we men are part and parcel of Nature. We have learned that we are "governed by" natural law, as it is commonly put; this, as we have seen above, meaning that in our activities we display the characteristics of the vastly complex organism (if we may use this term broadly), which we designate as Nature; that Nature would not be what it is but for us and our characteristics, and that a correct interpretation of Nature must therefore include the interpretation of all that we know as

* The contemplation of these frustration pains has evidently had much to do with the development of the position taken by Dr. Felix Adler in his valuable *An Ethical Philosophy of Life.*

our conscious experience. Thus it is that we must come to look upon ourselves as minute elements in this vastly complex "organism" which we know as Nature.

Now, when we study carefully any animal organism in itself—that of man, for instance—we seem to see in it a simulacrum of the whole organic system which we describe as Nature. When we study such an animal organism we find it a nicely balanced system of minor systems, each of which latter functions as a system—has its own "drive," to use Prof. Woodworth's term, its functioning being co-ordinated with that of other minor systems to yield the functioning of the organism as a whole.

If we consider any one of these minor systems in itself, such as the digestive system, for instance, we see that its normal reaction must be inhibited, under certain conditions, if what we know as an emotional reaction of the whole organism is necessary to the maintenance of the existence of the organism as such.

Now, if we keep in mind the animal organism as a whole we do not think of this inhibition of the digestive activities as a frustration, as a sacrifice; we see in it the special mode of reaction of the part tending to maintain the life of the organism as a whole; were its action not what it is the organism might well cease to exist. But if one imagines himself to be this digestive system, and that as such he has a consciousness like ours, this inhibition of its activities would appear as a frustration.

So it seems to me that if we could look upon Nature as a whole we should see ourselves as elemental parts of it whose frustrations, as we call them, are merely situations necessary to the continued existence of the organic unity of the whole of Nature. We cannot wish to eliminate such frustrations without wishing to wreck the organic

unity, or to place ourselves apart from it as isolated waifs in the Universe.

We regret, and seek to eliminate, the pain involved with this frustration; but this regret and this attempt at elimination are of the very essence of the maintenance of the systemic unity. The pain frequently warns us of danger to the part, and leads us to attempt to make such readjustments as are necessary to the general health of the organism.

If all our activities were painless or pleasant, we should find no incentive to adaptation to meet changed conditions; and such adaptations are of the very essence of moral conduct. Pains involve the appearance of problems which we make effort to solve. And as William James somewhere notes, while there is a problem of pain and of evil, there is no problem of pleasure and of the good; and much more clearly there is no problem of mere indifference.

When, again, we consider the grounds for holding that pleasure capacity would not be developed apart from the antecedent existence of pain capacity in the special direction involved, we seem to see that an existence devoid of the possibility of frustration and of its pain would mean an existence of pure indifference, and this would mean either a static situation—a condition of complete stagnation—in Nature, of which we are part, or else it would mean that we had become isolated units no longer part and parcel of Nature.

SEC. 8. Turning now to the consideration of pleasure attainment as a motive, we find it valuable to note certain further characteristics of pleasure and of its contradictory opposite, pain. In the first place, it will be ob-

served from what has been said above that pleasure and pain are not mental items of the nature of our sensations, images, thoughts, etc. Rather are they special qualifications of these mental items, very much as intensity is; for, as we realize, intensity is not a special mental item, *i. e.*, is not a sensation, image, thought, etc.; yet each mental item is more or less intense.

Pleasure and pain together bear a closer resemblance to another general quality of presentations which we may call the time quality. This is displayed in two phases, viz., pastness and futureness, with a transition state between the two which we speak of as presentness. Pastness, presentness, and futureness are not specific mental items, but each mental item, be it sensation, image, or idea, etc., must have attached to it the qualification either of pastness, or of futureness, or else of the transition between the two which we call presentness. No mental item can display more than one of these qualifications at the same time. The time quality thus appears as a two-phased general quality of all presentations, of such a nature that each mental element must display one of the two phases, pastness or futureness, or the transition state between the two which we call presentness; and no mental element can, at any one moment, display more than one of these qualifications.

So in like manner we may say that pleasure-pain is a two-phased general quality of all presentations, which we may call the algedonic quality. It is of such a nature that each mental element must display one of the two phases, pleasure or pain, or else the transition state between the two which we speak of as indifference. No mental item can display more than one of these qualifications at one and the same time.

It is to be especially noted, also, that the time quality is subject to a transitional relation in one direction only, as we have seen is the case with the algedonic quality. As the transition is always from pleasure through indifference to pain, so in like manner the transition is always from pastness, through presentness, to futureness.

The time quality is attached to specific mental items, so that we find in experience complex presentations, parts of which display pastness, parts presentness, and parts futureness; thus our experience in retrospect appears as a stream in time, part of which is coming to us from the future, part of which is here now, part of which is slipping away into the past. In like manner we find that the pleasure-pain quality is attached to mental elements, so that we find in experience complex presentations, parts of which are pleasant, parts painful, and parts indifferent. These we make note of especially in our æsthetic experiences, as in connection with Tragedy, for instance, where we discover what we describe as mixed states of pleasure and of pain.

SEC. 9. One point of importance is to be fixed in mind in this connection as having bearing upon questions to be considered in the chapter to follow. It appears that no general quality of presentations can be revived as an image, strictly speaking. We may form an idea of it, but if it is to be *experienced* we must appreciate it in fact, *i. e.*, we must revive some specific mental item to which it is attached. This is a characteristic of all general mental qualities. We cannot revive an experience of intensity unless we revive a mental item that is intense, although we are able to construct an idea of intensity as a whole. So neither pleasure nor pain can be revived as an image, although we are able to construct an idea of

pleasure as a whole, and an idea of pain as a whole. In other words, neither pleasure nor pain can be *re*-presented as such. If either the one or the other is to be experienced we must appreciate in fact, or in revival, some specific mental item of which the pleasure or the pain is a qualification.

That what we call the idea of pleasure is not an imaged pleasure is clearly shown in the fact that while certain ideas of pleasure may be pleasant, others may be distinctly painful. The idea of pleasure to be gained in a benevolent act is pleasant; but, on the other hand, the moral man often finds the idea of the pleasure of sensuous gratification distinctly repulsive and painful. Here the idea of pleasure is a special mental item, and, as is the case with all mental items, it must always be algedonically qualified, *i. e.*, it must be either pleasant or painful, or indifferent; and given the proper conditions, it may display any one of these qualitative forms.

SEC. 10. When a stimulus is given that would usually result in a certain form of activity, and if this activity is inhibited more or less completely, then we experience a widely diffused pain. An example of such experiences we have in the pain felt whenever we are suddenly prevented from continuing an activity that has been running smoothly, so to speak; as when the tennis player breaks his racket, or when the writer is suddenly called to lay aside his pen and stop the record of his flowing thought by the demand that he come to luncheon. Other examples we have in all cases of restriction, of shock, and of disappointment. Less noticeably, but for all that very pervasively, painful are our impulses in the realm of action, and our desires in the realm of ideas; both of which are due to the inhibition of the realization of what is

unrealized but conceived of as realizable, as we shall note more fully in the chapter to follow. The basis of pains of this type is obscure, but I am inclined to think their explanation is to be found in the occurrence of diffused activities of abnormally high grade.*

On the other hand, when an activity has been inhibited and the inhibition is removed, the recurrence of the activity is accompanied by some degree of pleasure, and the more complete the antecedent inhibition the stronger the pleasure. The schoolboy who is accustomed to constant activity finds it painful to remain quiet in his seat until the time of recess. When the signal is given for his release he turns to active play with a pleasure that is the greater for the preceding inhibition. The explanation of this gain of pleasure is found when we consider that during the time of the inhibition of activity the organic parts concerned have been rested, and have thus been enabled to accumulate a reserve of energy which is given out, with pleasure, when the rested parts are again brought into play.

Further examples we have in the pleasure gained when the behavior suggested by our impulses is carried out, and when our desires are realized. And here we note clearly that the pleasure of satisfaction is proportioned to the painfulness of the antecedent impulse or desire, as the case may be.

SEC. 11. More clearly related to the nature of conduct, which is the matter of our especial concern, is the relation that pleasure bears to efficient activity, and that pain bears to inefficient activity. We do not need to enlarge upon the self-evident fact that in general our

* For a detailed study of these pains of inhibition, *cf.* my *Pain, Pleasure, and Æsthetics*, pp. 213 *f.*

efficient activities are our pleasant ones; and that, on the other hand, our painful activities are more or less inefficient. We play our best games of tennis when we are fresh, and every act brings muscular pleasure. When we are tired, and find the exercise disagreeable, we can no longer count on good play.

Facts of this nature are so obvious that we find their theoretical significance studied from the days of Aristotle to modern times. If we could hold that bodily efficiency was always indicated by acts that are pleasant, and bodily inefficiency always indicated by acts that are painful, we should have in the experience of pleasures and pains clear guides to conduct. But such is not the case. Those who would defend such a view are at once brought face to face with the fact that certain very pleasant experiences are very detrimental to the organism; many destructive poisons have an exceedingly agreeable taste. On the other hand, certain very painful experiences tend to yield bodily efficiency; many very painful modes of treatment by the surgeon or the physician are conducive to bodily health.

These objections are so apparent that, although the very frequently observed correlation of bodily efficiency-inefficiency with pleasure-pain has been often remarked upon, and has from time to time been presented to the consideration of ethical students, it has not been found possible to make use of it as a basis of ethical theory.

SEC. 12. Those evolutionists who concern themselves with the consideration of the relation of ethical values to racial survival have again brought this correlation into prominence, aiming to show that our pleasant activities, where not efficient in relation to the individual, are efficient in relation to the race to which the individual be-

longs; and that our painful activities, where not inefficient in relation to the individual, point to racial dangers. That there is a general correlation such as is here suggested is without doubt true; indeed, as we shall presently see, it must hold *in general* if evolutionary doctrines are sound. But the facts thus brought to our notice do not enable us to explain in terms of bodily efficiency-inefficiency the exceptional cases where pleasure brings injury to the individual or the race, and where pain brings advantage.

These difficulties are overcome, however, if we take into consideration the view that pleasure and pain are qualifications of mental *elements;* for then it may well be that they signify efficient and inefficient activities respectively in the physical elements which correspond with these mental elements.

If this view be accepted, then the pleasant taste of the poison indicates that the nerve activities correlated with the taste are efficient; and this may well be the case, even though the poison itself be injurious to the whole organism. So, again, the painful cutting indicates inefficient action in the parts directly concerned, even though the excision of these parts under the surgeon's knife may tend to render the whole body more efficient than it was before.

Under this view we also see how it must be that *in general* there is a correlation between efficiency-inefficiency of the body and the pleasure-pain experienced, if the current conceptions of animal evolution are true. For it is apparent that if an animal finds pleasure in connection with and hence enforces *elemental* activities that are detrimental to its organism as a whole, and if it finds pain in connection with and curtails *elemental* activities that are

of advantage to its organism as a whole, such an animal will be at a disadvantage in the struggle of life. On the other hand, an animal that finds pleasure in connection with and enforces *elemental* activities that are advantageous to the organism as a whole, and that finds pain in connection with and curtails *elemental* activities that are detrimental to the organism as a whole, such an animal will be advantageously placed in the struggle of life.

Hence, *in the long run*, we should expect to find what we do find, viz., that the animals that survive and propagate their kind are those that display a general correspondence between painful elemental activities and disadvantage to the individual, and between pleasant elemental activities and advantage to the individual. But in consideration of the complexity of animal organisms, and the difficulties attendant upon the adjustment of the functioning of the parts to the functioning of the whole, we should also expect to note many exceptions to this rule determined by the fact that the adjustment of elemental activities to meet the needs of the whole complex system of elements is at best only proximate.

Similarly we should expect to find what we do find *in general*, viz., that the pleasant activities indulged in by an individual of a race are advantageous to him as a member of that race; and that the activities which an individual of a race finds to be painful are in general disadvantageous to the race; for if they were not the race would in time disappear. Yet here, again, we should expect to find not a few exceptions to this general rule determined by the fact that the adjustment of the activities of individuals to meet the needs of the race is at best only proximate. Thus we find it not surprising that individual men find pleasure in indulgences which

are clearly detrimental to the race, and find painful certain activities which are of racial advantage. If their race is to persist such individuals must necessarily become less and less in number. If they gain the ascendancy then their race must eventually disappear.

SEC. 13. It is apparent that the efficiency of behavior of any special part involves inherent ability to continue this behavior, and a tendency to continuance of the activities concerned; and that the inefficiency of behavior of any special part involves inherent inability to continue the activities concerned, and a tendency to stop on the part of these activities. Pleasure which is related to elemental efficiency thus involves the tendency to continuance in attention of the mental item to which it is attached; and pain which is related to elemental inefficiency indicates a tendency to disappearance from attention of the mental item to which it is attached.

Pleasure thus indicates a particular direction in which our behavior is likely to be efficient, and pain indicates a particular direction in which our behavior is likely to be inefficient. But we must recall that efficiency or inefficiency of the behavior of a special part of our complex organisms does not necessarily imply a corresponding efficiency or inefficiency in relation to the organism as a whole; and, therefore, that pleasure and pain do not necessarily point to general advantage to the organic whole. Poisons, as we have seen, may be pleasantly sweet, and the beneficial surgeon's cuttings are invariably painful.

We should thus be put on our guard. We should look beyond the mere activities of the moment that yield pleasure or pain; for, contrary to our natural inclinations, the continuation of the pain and the curtailment of the

pleasure may in the end prove to be on the whole beneficent.

SEC. 14. It is to be noted, also, that pleasure and pain indicate present situations only. The efficiency and inefficiency they respectively indicate involve definite relations with the past, but they point only indefinitely to the future. They tell us of situations in the past experience of life which have yielded the present conditions, but they do not necessarily tell of satisfactory behavior in relation to the future where the conditions may be in large measure new.

This is a point that is too often and too generally overlooked. All of the important acts of life, and especially our moral acts, involve modifications of conduct, adjustment to conditions that are new to the organism as it exists. Hence it is clear that we cannot allow ourselves to employ pleasures and pains as more than indicative of the nature of the present situations with which we have to deal in our adjustment to conditions which seem likely to appear in the future.

SEC. 15. It has seemed well to study the nature of pleasure and of pain thus in detail, because upon them, considered as motives, have been based the important hedonistic ethical doctrine which we shall study in our next chapter. In closing this brief survey of the field we may consider, by way of illustration, a case where many of us are accustomed nowadays to look upon pleasure and pain as direct and distinct guides to conduct.

We have become much impressed by the fact that children educated in accord with the methods employed by our forefathers often find their tasks very painful and that they learn slowly, and by the further fact that where

they are given work that is altogether pleasant they advance rapidly. In consideration of what has been said above as to the relation of pleasure-pain to efficiency-inefficiency, this must be the case.

The emphasis of these facts has led to the devising of certain educational systems by the followers of Froebel and Montessori, which aim to amuse the child in connection with its studies, and to let it undertake only the work it finds agreeable, it being assumed that thus its development will be fostered by the encouragement of its free self-expression.

SEC. 16. It is interesting in this connection to note how easy it is for us to look upon ourselves as great inventors, for most of us think this pedagogical method to be a quite new thing under the sun. Yet some two thousand three hundred years ago Plato in his *Laws** suggested to the Greeks of his day that it would be well for them to teach arithmetic to the young by means of games, in accordance with the custom well established among the Egyptians of his time. And in his *Republic*† we find him reporting this interesting bit of conversation between Socrates and Glaucus:

Socrates: Bodily exercise, when compulsory, does no harm to the body; but knowledge which is acquired under compulsion obtains no hold on the mind.

Glaucus: Very true.

Socrates: Then, my good friend, I said, do not use compulsion, but let early education be a sort of amusement; you will then be better able to find out the natural bent.

So it appears that this idea of making education an amusement is not so very new after all. In fact, there are

* Jowett's translation, vol. V, p. 202.

† Jowett's translation, vol. III, p. 240.

no indications in the context of the "Dialogues" referred to that Plato himself thought the idea particularly original.

Like all of Plato's sayings, this one contains the expression of an important truth, but if interpreted, as it seems on its face most easily interpretable, to mean that we should aim to educate the child solely by means of amusement, it surely leads to a great error. Certainly, when one considers the close attention that has been paid to every remark of Plato's during twenty-three hundred years, it must be agreed to be highly probable that attempts have again and again been made to embody in practice the notion he thus apparently presents. But it is equally certain that it has not become an established part of our educational procedure; and this is probably because, when put to the test, it has not been found successful as a pedagogical method.

Doubt is indeed thrown upon the above easy interpretation of the words of Socrates, as thus reported, when we note that he had been previously said by Plato to remark that "Youth is the time for any extraordinary toil; and therefore calculation and geometry, and all other elements of instruction which are a preparation for dialectic, should be presented to the mind in childhood." This certainly does not look at all like amusement for children as we know them.

When, confronted by this apparent contradiction, we turn again to Socrates' words as previously quoted, we see that they need not refer necessarily to a general educational principle, but may be intended merely as general advice to the teacher; to warn him not to attempt to force certain studies upon a child who is not sufficiently developed to assimilate the conceptions they involve; and to urge him to note the subjects that interest the child,

for in doing so he will "be better able to find out the natural bent," and will thus be guided in urging upon him certain studies. But surely, if even these are completely grasped, the acquisition will involve disagreeable hard work.

This is, however, a digression. Let us consider the problem in the light of our previous study.

SEC. 17. We find certain traditional educational methods existing which do not accord with our newer self-created ideals. We long to make the child love, and take delight in, learning, as we know he now very generally does not. We long to have him ask to do the things he finds himself wishing to do, these wishes being found indicative of pleasure, and of a capacity to work well in the line suggested by them.

Now it is to be noted, in the first place, as has already been remarked, that the traditional educational methods have grown up as the result of long ages of experience, during which it is highly probable that many of the experiments now suggested have already been tried, and have left no record because they have failed.

Furthermore, we may note that if it had been found best for the child in its studies to do only what it wishes to do, no educational system whatever would ever have been evolved. For these educational systems have been devised just because the fathers of the race have found that their children do not naturally wish to learn certain of those things which their elders, in their riper experience, knew are well worth their learning. Few, if any, children, I am sure, can ever enjoy learning, or can ever wish to learn, the multiplication table; yet the adult realizes that without this bit of knowledge the child's efficiency will be curtailed during the whole of life.

Again, we must remind ourselves that pleasure and pain indicate existing situations, tell of present capacity or incapacity, while as educators we are aiming to create new capacities in the child, aiming to aid it to a better development.

Moreover, pleasure, as we have seen, is notably evanescent, and this means that if the child is left without restraint, and allows himself to be guided by pleasure alone, his effort in any given direction will soon cease. But we all realize that, if he is to attain mastery, his efforts must not be allowed to cease when pleasure disappears. The oarsman who stops rowing as soon as his muscular exercise begins to be disagreeable will never gain the strength to win the race. He must persist through weariness if he is to reach a high degree of efficiency, and an added experience of pleasure in the use of this efficiency. In fact, *gain* of efficiency and *gain* of capacity to find pleasure in work can only be attained through effort which goes beyond the bounds of present efficiency, and oversteps pleasure in the direction of painfulness.

It is the application of this principle that accounts for the existence of the traditional pedagogical method which leads the teacher to insist upon compelling the pupil to undertake tasks that are no longer pleasant to him.

SEC. 18. I may perhaps be permitted to say a word in closing in relation to the general question of pedagogical reform, quite apart from the immediate point in connection with which I have used it as an illustration. Those who are impressed by the ideal above considered are inclined at first to belittle the value of all traditional methods of education which seem to oppose its insight. But in this they are clearly wrong. Surely we should take account of all that we can learn from the ideals of

the past as indicated by these traditional methods. Surely we should be most cautious in opposing their dictates, for they speak of the experience of the ages, while our individualistic ideal is tentative and experimental, and all too likely to prove futile.

On the other hand, we cannot overlook the fact that the educational systems which embody the traditional ideal have been devised under conditions some of which do not exist to-day, and that we are therefore not merely warranted in making, but actually called upon to make, attempt to alter them so far as this is necessary to adapt them to these new conditions. So, although we should never lose sight of the fact that the reforms we propose may fail to accomplish the end we have in view, nevertheless it is clear that if the conditions are new, and if no change to meet these new conditions is attempted, there certainly can be no hope that these new conditions will be met; clear that no advance can be made.

We must not forget, however, that in attempting to reform these educational methods given to us by our ancestors, we are experimenting, and experimenting with human beings. And in so doing we assume a grave responsibility which should not be taken lightly.

CHAPTER VII

HAPPINESS

I

SEC. 1. As we have seen, Herbert Spencer, with substantial correctness, defines pleasure as "a feeling which we seek to bring into consciousness, and to retain there"; and pain as "a feeling which we seek to get out of consciousness, and to keep out." In other words, if we think of an act to which the idea of pleasure is firmly attached, or of an act to which the idea of pain is firmly attached, we naturally tend to make efforts to realize the former and to prevent the realization of the latter. Thus it happens that we find ourselves appreciating at times that the motive that impels us to a given act is the attainment of what is known to produce pleasure, and at other times that the motive is the avoidance of what is known to produce pain. The avoidance of pain is so often followed by an experience of pleasure that the effort to avoid pain is itself commonly, although, as we have seen, unjustifiably, assumed to be merely an effort to gain pleasure by indirection.

Cases of this nature are frequent in our experience, and when they occur are likely to be emphatic. We can scarcely find it other than natural, then, that the careless thinker should leap to the conclusion that all our acts are motived by the wish to gain pleasure. Nor perhaps ought we to be surprised to find a group of early Greek philosophers, sufficiently dignified to attract the atten-

tion of later greater men, maintaining seriously this doctrine, technically spoken of as egoistic hedonism, as did Aristippus and others of the Cyrenaic school. More careful thinkers have indeed come to appreciate clearly that there are many of our acts that do not seem to be motived by any prospect of personal pleasure; nevertheless, we still to this day find in literature, especially among important poets of a romanticist turn of mind, not infrequent expressions indicative of the writer's acceptance of this view.

The weakness of this doctrine, however, became striking as soon as it was seen to involve the notion that the life to be striven for would be that of the man who aimed to crowd as much pleasure as possible into every moment. Not only was it apparent that those who approximated to such a course of life were often the most degraded and unhappy of men, but it became clear that even the average man looks far beyond the moment of enjoyment to the future consequences of his acts.

Hence arose the school of Epicureans who still clung to the notion that pleasure is the *summum bonum* which we should aim to attain, but who held that the rational hedonist should aim at a life of enduring happiness, true pleasure being only obtainable through self-control and the guidance of reason.

The practical difficulties of gaining the foresight looking to this end, on the part of even the most thoughtful of men, called attention to the fact that the average man makes no attempt whatever to gain such foresight; a fact that, from the start, tended to discredit the doctrine, which, as the reader will perceive, was purely individualistic. And as time passed more and more stress was placed upon the evidence that civilized men are moved

to action for the most part by the picturing of the effects of their acts not upon themselves alone, but also upon the lives of their fellows.

The recognition of the fact that a large proportion of men find a distinct gratification in mere sympathy with others in their joys and sufferings, led to the emphasis of the notion that the pleasure of the individual must be taken to include this pleasure of sympathy. Later under the influence, mainly, of Hume, Bentham, and John Mill, there developed a new form of the doctrine here considered, from Universalistic Hedonism, through Utilitarianism, to what we may call modern Social Ethics, still in its formative stage, and scarcely identifiable with hedonistic doctrines. According to the Utilitarian doctrine, the motive to action should be the attainment of the greatest pleasure or happiness by the greatest number.

The latest developments of this doctrine have been much influenced by the prominence in men's thought of the doctrine of evolution. Darwin and his followers brought forward cogent evidence to fix in men's minds the view that the moral impulses tend to emphasize social, and hence racial, values, as these are opposed to individualistic values. And Herbert Spencer, enlarging upon developmental conceptions, in effect made his moral criterion survival values; while Leslie Stephen specifically made it the health of the social organism.

II

SEC. 2. This last-mentioned conception, because so near to us in time may first be referred to. Spencer's contentions were rendered more or less plausible so long as it was assumed, as he assumed, that traits acquired

by an individual can be, and often are, directly inherited by his offspring. For if this were accepted as true it seemed possible to hold that habits of action looking to racial values that are acquired by an individual may often be found to be instinctive in his descendants; and in such case there appeared ground for holding that far-seeing direction of our activities to the attainment of survival values might yield rapid results in the realization of racial efficiency and happiness.

Modern studies have shown, however, that the conception of the inheritance of acquired traits is very difficult to sustain; and in the form held by Spencer it has been thoroughly discredited since his day. The most that can be maintained with any degree of assurance, therefore, is that in the long run those individuals who happen to display habits of action that are of racial value will tend to survive in the struggle for existence. But it is clear that this can only be true in a general way, and, therefore, that the establishment of racial efficiency and happiness by making such efficiency a motive can only result from long-drawn-out processes under stable conditions. At the same time it is equally clear that we have very little warrant for holding that the conditions of life that to us appear stable are so in reality, and that we are profoundly ignorant in regard to the trends of evolutionary development.

Thus it appears that even the most intelligent and far-seeing of men must fail to find a clear leading in a motive of this nature. So far as he makes attempts to strengthen racial efficiency his chances of success are slight. Indeed, in attempting to reduce the inefficiency and misery of mankind he is very likely to suggest means which actually tend to produce racial inefficiency rather than

racial efficiency. Note, for instance, the devices of the modern humanitarian looking to the preservation of the lives of the weak of mind and body, who but for his efforts would tend to be rapidly eliminated.

No more can be claimed, then, by one who upholds this view than that as moral values are social and racial, and as survival values are bound up with racial efficiency and indirectly with individual efficiency, and as this efficiency carries with it in general in the individual the experience of pleasure and in the race happiness, the attainment of which may become a motive to action, therefore survival values may be gained by making it our ethical aim to attain pleasure or general happiness.

Thus it would appear that if we are to find ethical significance in connection with this conception of survival values we are thrown back to hedonism.

III

SEC. 3. As evolutionary ethics was a special outgrowth from utilitarian theories that were current at the time when the influence of what we call Darwinism became dominant, we are naturally led to consider the currents of thought involved with the maintenance of the doctrine that the moral man should aim to act in manners that will tend to produce the greatest happiness of the greatest number; this resulting often in the subordination of the pleasure of the individual actor, and not infrequently in his choice of pain.

As we study the development of this doctrine we note a tendency to substitute the term happiness for the term pleasure when reference is made to mankind as a whole,

and many writers treat of happiness as something quite apart from pleasure. Without question it is permissible to use the term happiness, as the Greek philosophers often employed its equivalent, for purely descriptive purposes, to apply to certain forms of pleasure, viz., those that yield more enduring satisfaction; and to limit the use of the word pleasure to apply to the fleeting sense pleasures. But if we are led by such usage to think of happiness as distinct from pleasure we fall into error, and are thus led to overlook the real questions involved in the doctrines in which it figures. Those who would defend the view that happiness refers to something other than pleasure find themselves forced to remain content with vagueness when they attempt to define the term.*

No one will question, in any event, the fact that this indefinable somewhat, happiness, is pleasant in itself. And when we note that the utilitarian use of the word constantly leads us to think in hedonic terms, it seems impossible to avoid the conclusion that Locke is justified in holding that "happiness . . . in its full extent is the utmost pleasure we are capable of." It is the broadest and most permanent form of pleasure, and must be taken to have this meaning.

Pleasure is thus made the *summum bonum* in Utilitarianism, which thus appears as a mere development of Universalistic hedonism which latter need not be considered separately.

SEC. 4. The Utilitarian commonly speaks as though it were self-evident that a sharp distinction can be made between utilitarian hedonism and egoistic hedonism; but

* Concerning the difficulties of determining what constitutes the greatest happiness, referred to in the Utilitarian doctrine: *cf.* Sidgwick's *Methods of Ethics*, book II, chap. III.

when we ask how far this distinction is warranted we find ourselves baffled in no small degree.

In making the giving of pleasure to others our motive to action we certainly assume that men as a general rule make the attainment of pleasure their immediate aim, and that we are fully justified in encouraging them in this way of thought. This surely points to the notion that Utilitarianism is based upon foundations in egoistic hedonism.

Again we note that, in the effort to make Utilitarianism or universalistic hedonism appear rational, recourse is often had to the hypothesis that there is a qualitative difference among pleasures. Thus some are held to be "higher" and others "lower"; those that relate to the community being placed in the former class, and those that relate to the individual in the latter class. It is then argued that it is no more than rational to choose the "higher" pleasures, rather than the "lower."

Evidently if it turns out that the distinction between "higher" and "lower" pleasures is one of degree only, we in arguing thus are reverting to egoistic hedonism pure and simple, for the "higher" pleasures which we are supposed to choose will be merely those that are the fullest or strongest ones for the individual. And as a matter of fact, the more carefully one considers this point, the more clear does it appear that there is no other distinction between pleasures in themselves than a quantitative one.

Pleasure, as we have seen, is a general quality of mental items. But all the general qualities of presentations have one characteristic in common: viz., experiences of them are differentiated only in degree, and not in kind. Intensities in themselves differ only in degree; they can-

not be spoken of as higher or lower except as we mean to apply these terms as the equivalents of greater and less, respectively. So pleasures may be of greater or less strength, but if they are treated as such, and apart from the mental items to which they attach, no other distinction can be made between them. Bentham was correct when he said "quantity of pleasure being equal, push-pin is as good as poetry."

That all intelligent men prefer poetry pleasure to push-pin pleasure is true. It would seem to be true even if we assume the pleasure in each case to be of the same degree; and this fact makes it clear that in this preference we base our grading upon other data than the degree of pleasure found attached to the several mental items considered at the moment of choice. If these other data are not found to be pleasures, then evidently one who agrees that he is justified in choosing the "higher" rather than the "lower" is abandoning hedonism altogether.

And it seems certain that these other data that are thus graded are not pleasures in themselves. They refer not to present pleasure but to future pleasure. They are thus ideas. They may be what we call ideas of pleasure, to be sure, but these cannot be looked upon as weakened pleasures given in the form of images, for, as we have seen in the preceding chapter, no true images of general qualities can be given. We cannot experience an intensity apart from some mental item that is intense; so we cannot experience a pleasure as such apart from some mental item that is pleasant. So it would appear that in speaking of "higher" and "lower" pleasures we are dealing with ideas (which may or may not be colored by pleasure at the moment of their occurrence), the qualitative difference between which must be given by charac-

teristics that are quite apart from the pleasure present at the moment of comparison.

SEC. 5. The situation may be summed up, then, as follows: If we deny that we refer to the mere quantity of pleasure when we choose the "higher" rather than the "lower" pleasures, then the basis of our choice is found in ideas quite apart from the pleasure attached to them; and if that is so we are accepting other criteria than pleasure, and are definitely abandoning a thoroughgoing hedonism of any form. If, on the other hand, we agree that, in comparing ideas of what will give pleasure, we do refer to mere quantity of pleasure, then we revert directly to egoistic hedonism, which we shall consider later.

SEC. 6. Other difficulties in the way of the acceptance of the utilitarian doctrine appear in connection with a thorough analysis of the mental situations involved;* I shall not consider them in detail, however, because I find one formidable objection to the theory which, in my view, has not been sufficiently emphasized, and which seems to be in itself sufficient to compel us to abandon it altogether.

This objection is brought to our attention at once if we ask one question. When it is held that we should aim to produce the greatest happiness of the greatest number, what do we mean by this "greatest number"?

It is apparent to the modern biological student that the community of highly moral, highly civilized, men with whom we live cannot by any process be separated by any logical line of demarcation from those of our own race who have not this high morality and civilization. It is equally apparent that our own part of the human

* *Cf.* my *Instinct and Reason*, chaps. XXII and XXIII.

race cannot be separated from the semibarbarous inhabitants of the plains of Persia, or of the fastnesses of Hindustan; nor can we draw any line which enables us logically to cut off the lowest barbarian of the interior of Africa from consideration in connection with the proposed rule of action here discussed.

But beyond that, although there is a gap unbridged between the lowest man and the highest animal, evolutionary doctrine forbids us to consider the *genus homo* as a class against which the whole race of animals must be arrayed. Theoretically I am unable to see any reason why we should not include the whole of animal life in any scheme which looks to general happiness.

This difficulty was not apparent to those who lived before the evidence of our kinship with the animals had become so convincing as it is to-day. Later utilitarian writers who are faced by this difficulty are likely to evade it by assuming that there are assignable limits to the effects of our conduct, and that we have to take into account only "all whose happiness is affected by the conduct," as Prof. Sidgwick puts it.* But it seems to me that our modern conception of the nature of organic life, as a whole, necessarily implies that our actions affect all other organisms which are in some measure, either directly or indirectly, influenced by our activity.

But lest I be thought to be going too far, I am willing for the sake of argument to assume that mankind has a special nobility, and to agree to limit to mankind, as a whole, the number whose happiness we must consider under this rule. If any valid reason can be presented why any of mankind should be excluded from our consideration, I fail to appreciate it. Criminals are men

* *Op. cit.*, book IV, sec. 1.

who act deliberately to satisfy cravings which seem to them perfectly rational, but which we think warrant us in making of them a separate class; but this only in order that we may protect ourselves from harm, and our civilization from disintegration. That their happiness is involved in their actions, and that their characters differ from ours only in certain directions, or only in degree of emphasis of capacity, is self-evident. The weak-minded in like manner can in no way be eliminated from our consideration. Even if we assume with Cumberland that our guide should be the "common good of all rationals," our extension of the application of reason prevents us from thus avoiding the conclusion just reached.

If we bear this in mind we are at once struck by the fact that it is impossible to hold that the most thoroughgoing utilitarian moralist does, or can, desire the greatest happiness of all mankind, or that he could satisfy his conscience if he did so. As a matter of fact, what he does is to attempt to imagine the sum total of the happiness of that special group of mankind which comes within his necessarily limited experience of the race, and whose desires and motives he is able to picture somewhat vividly, and to which he finds a response within his own Self.

The fact that the best of men do thus limit the classes of mankind whose happiness they take into account, to say nothing of animal life, leads us naturally again to see that this limitation is a necessary one, and that this involves a failure of the rule we are studying.

I for one think this limitation is necessary, and the failure of the rule therefore positive. None of us in practice takes into consideration all sentient beings; "enthusiasm for Humanity" is the highest ideal the most ardent utilitarian ever sets before himself; but this is an

ideal rather than a possible working rule. There are exceedingly few if any actions which can be determined by the consideration of their effects upon the whole race of men. The most we can do, if we labor to the uttermost, is to endeavor to broaden our view to include the masses of the civilized, and this is possible in relatively few cases. For the most part our actions can be determined only by reference to the relatively small groups of mankind which make up our own civic communities: patriotism forces us to exclude from consideration the desires of all who call themselves our enemies; opposition to adultery excludes from consideration the desires of a still larger group; the family virtues exclude from consideration a still more numerous class of men.

All this would seem to show that each one of us must necessarily be governed by his own personal nature in determining those to whom the principle under discussion is to be applied; and this in itself involves the failure of the principle as one of thoroughgoing validity.

IV

SEC. 7. We have seen above that an analysis of the tenets of universalistic hedonism, or Utilitarianism, forces us either to abandon hedonism altogether, or to fall back upon it in its egoistic form. We need not pause to consider the doctrine of egoistic hedonism as it was stated in the early stages of its development, for its evident evil consequences above spoken of must make it thoroughly repulsive to every thoughtful man. We do feel bound, however, to examine the form it has taken in the hands of later thinkers who claim to deal with enduring happi-

ness, and thus to take into account the significance of self-control and the guidance of reason.

The claim of the egoistic hedonist is that we always have the attainment of our own pleasure as our end in view, and that when we have before the mind alternatives we always choose the greatest of the two pleasures foreseen. When he is faced by the fact that the rational man often discards vivid pleasures in favor of ends that seem unlikely to give him equal pleasure, or that seem likely to give him indifference or even pain; he tells us that at the moment of choice he reflects upon two sources of pleasure, and that then what we call the more vivid pleasures of the present appear to him to be really less pleasant in prospect than do the pleasures to be gained by their renunciation.

SEC. 8. We may at the start consider a somewhat subtle point that appears on its face to have bearing upon this doctrine. Leslie Stephen in his *Science of Ethics** tells us that "it is more accurate to say that my conduct is determined by the pleasantest judgment, than to say that it is determined by my judgment of what is pleasant." This at first sight looks like an attempted restatement of the doctrine under examination. But evidently it is not; it merely turns our thought away from the questions at issue. For whether our acts are always determined by what is thought of as likely to yield the pleasantest result, or whether they are not; in either case it may be true that we act in accord with the pleasantest judgment.

And it probably is true that we do so act. To be sure, we cannot verify this by reference to experience, for we cannot gain in retrospect the pleasure that would have

* P. 47.

accrued had we acted in accord with a judgment which did not determine our action, to compare it with the pleasure involved with the judgment that actually did determine it. Nevertheless it would seem that normally, in cases of contesting judgments, the pleasantest must win, for it must be the more efficient of the two; and as pleasure-getting is involved with efficiency, it is likely that the winning judgment of two in opposition must be also the pleasantest.

But, as I have said already, this is quite apart from the question at issue, for the pleasure of the judgment itself is no more than the accompaniment of the act of will; and it is not this act itself, but the pleasure resultant of this act, with which the egoistic hedonist concerns himself.

SEC. 9. The main support of egoistic hedonism, in its more rational form, is found in the experience of desire. We note that when we find ourselves hesitating between two contradictory courses of action we usually appreciate two contradictory desires. We also appreciate the fact that the satisfaction of a desire is a marked pleasure, and that, as we have seen,* the degree of this pleasure is in a general way proportioned to the strength of the desire. From this the egoistic hedonist argues that the object of desire is always the attainment of future pleasures, and that we always act in accord with the strongest desire, that is to say, toward the greatest pleasure. He thus claims to avoid the evil implications of the earliest types of the egoistic theory, for he is able to hold that the rational man foresees the evil consequences of a life devoted to crowding as much pleasure as possible into every moment, and that this foresight weakens the desire

* *Cf.* chap. VI, sec. 8.

to gain immediate pleasure; and, positively or relatively, strengthens the desire to act to gain enduring happiness through self-control and the guidance of reason. How firmly his claim is grounded can only be determined by a careful study of the nature of desire.

SEC. 10. The mental state which we describe as desire is very evidently closely related with the mental state which we describe by the word impulse, employed in the psychological and not in the physical sense.* Impulses and desires often rapidly replace one another; in fact, at times the one appears to exist on top of the other, if we may so speak. The desire to taste a bit of luscious fruit before me may be displaced by what I call the desire to grasp it, and this second desire by what I call the impulse to grasp it. Or the desire to taste it may be displaced by the impulse to grasp it without any appreciation of the intermediate desire. At other times the desire to grasp, and the impulse to grasp, seem to exist contemporaneously. The two words evidently apply to diverse mental items, but to items that are very intimately related, and of very similar form.

SEC. 11. A careful study of our impulses, where they are so marked as to show their distinctive nature, leads us to perceive that they are experiences resultant from the *inhibition* of instinctive tendencies. When danger is imminent I tend to fly from it instinctively. If I yield to

* The experienced impulse with which we here deal, when objectively considered, is still often called an impulse. But the term is also applied objectively to situations in the physical world which bear no relation to experienced impulses. Thus the word has a double meaning that is most unfortunate in that it is apt to lead the psychologist, who deals with the experienced impulse only, to drift into thinking of it as an objective fact of a physical nature, this resulting in much confusion.

this tendency I experience no impulse to fly; rather do I experience the "instinct feeling" accompanying the sudden and powerful instinctive reaction, which, as we have seen, we describe as the emotion of fear. If, however, the instinctive tendency is thwarted by obstruction in my path, or let us say by the fear of a future accusation of cowardice, then I appreciate an impulse to fly.

Impulses as due to inhibitions are always accompanied by what we call uneasiness; that is to say, they are always disagreeable or painful, as we have seen all inhibitions are. On the other hand, as we have also seen, the relief of an inhibition, and the resultant free development of the inhibited activities, is always pleasant.* Thus we find, as we should expect to find, that the realization of an impulse in action is always pleasant. We may describe it as the satisfaction of the impulse. Being prevented by the presence of a friend, I feel a strong impulse to go to my writing-table to finish this sentence. When he leaves me I turn to the table with marked pleasure.

So far as the impulsive situation is objectively viewed in contemplation in the realm of ideas we may say that the object of an impulse is the realization of certain hitherto unrealized forms of behavior in relation to the environment, which realization will in the nature of the case yield pleasure.

It is evident, however, that the recognition of the fact that this realization will yield pleasure is no part of the impulse itself, and can in no way be considered as constitutive of its object. For impulses must have been experienced from the very earliest moments of life, whereas the appreciation of the fact that the realization of the im-

* *Cf.* chap. VI, sec. 8.

pulse will give pleasure must have been a relatively late acquisition, based upon a review of many experiences of impulses, some realized and some unrealized; and the observation of the fact that pleasure was gained in cases of realization which was lacking in the cases of non-realization.

SEC. 12. Desires exist in the field of ideation, and in that realm are the correspondents of impulses in the realm of instinct-feeling. A desire appears when an idea fails of realization; that is to say, when it is *inhibited* from developing smoothly in relation to the mental system that is emphatic for the moment, and in control. If a given idea does thus develop without obstruction it is then realized; that is to say, it becomes stable and real in the apperceptive system of the moment, and then we experience no desire. If the idea of a completed solution of a problem is at once followed by its solution I appreciate no desire to complete it. If, however, an idea that is powerful and persistent is recognized to be unrealized, we have in experience the state we describe as desire.

Desires, as due to inhibitions, are always painful, as we have seen all inhibitions are. On the other hand, as we have also seen, the relief of an inhibition, and the resultant free realization is always pleasant;* thus we find, as we should expect to find, that the realization of a desire idea is always pleasant. We describe it as the satisfaction of the desire.

As the object of an impulse is the realization of special unrealized forms of behavior, so the object of desire is the realization of special unrealized ideas. It is true that we come to recognize that this realization will yield plea-

* *Cf.* chap. VI, sec. 8.

sure, but it is evident that this recognition is no part of the desire, and can in no way be considered as constitutive of its object; for desires must have been experienced without number from the earliest dawn of intelligence; whereas the appreciation of the fact that the satisfaction of the desire will give pleasure must have been a relatively late acquisition, based upon a review of many experiences of desires, some realized and some unrealized; and the observation of the fact that pleasure was gained in the cases of realization which was lacking in the cases of non-realization.

SEC. 13. The points thus made may be emphasized by a parallel comparison between the acknowledged characteristics of impulse, and those of desire which are not always so clearly recognized.

Impulses are due to the inhibition of the realization of instinctive tendencies.

Impulses in themselves are always disagreeable.

The relief of the inhibition which yields the impulse, and the consequent realization of the appropriate instinct-action, yields pleasure. This may be called the satisfaction of the impulse.

The object of an impulse is the realization of a certain hitherto unrealized form of behavior.

The fact that this realization will give pleasure is no part of the impulse; nor can it be said to constitute its object.

Desires are due to the inhibition of the realization of ideas.

Desires in themselves are always disagreeable.

The relief of the inhibition which yields the desire, and the consequent realization of the hitherto unrealized idea, yields pleasure, which is commonly spoken of as the satisfaction of the desire.

The object of a desire is the realization of a hitherto unrealized idea.

The fact that this realization will give the pleasure of satisfaction is no part of the desire; nor can it be said to constitute its object.

SEC. 14. The detailed analysis of the nature of desire, when compared with that of impulse, thus gives us reason to take a decided position in relation to the vexed question as to the essential nature of the object of desire; for it seems to make it clear that while pleasure may be, it is not necessarily, this object. We are thus led to support the view that when, being hungry, food is placed before us, the object of our desire is the food, and not the pleasure which may be indirectly connected with its mastication.

In certain cases, to be sure, the unrealized idea is the attainment of pleasure; then this idea of pleasure attainment is the object of desire. But I think it must be granted that such experiences are relatively rare. In a large proportion of cases desires fade away without the appearance in connection with them of any idea of pleasure to be gained in the realization of the ideas involved.

It is true that in reflection upon a desire that is unrelated to pleasure attainment, but which is persistent, there often appears in close attachment to it an added idea that its realization will yield pleasure. But this is a new idea yielding a new desire. It is not an image of a pleasure bound up with the original desire; for, as we have seen, pleasures cannot be said to be imaged, if we speak properly. In such cases the idea of pleasure attainment becomes a new object of desire, and is not of the essence of the original desire. As a motive to action it can never be more than a new motive added to the original motive involved with the primary desire.

This is made clear when we note, with Dr. Everett,* that "the moment such a desire" [for pleasure] "is in way of realization the object of choice becomes more than the idea of pleasure; it takes on specific content. If, after

* Walter Goodnow Everett, *Moral Values*, p. 111.

a period of monotonous work we desire play, we are compelled to cast about for some specific form of amusement. It may be golf or tennis, music or the theatre, but in any case the object of our choice ceases to be merely the idea of pleasure."

That this is true becomes more evident when we note that the idea of the attainment of pain, rather than that of the attainment of pleasure, is not infrequently thus bound up with the desire that prevails. Take the case of the man who deliberately faces painful death and acts to save some stranger from a burning building. Surely there can be no idea of subsequent pleasure in connection with the desire that here presses him to action; rather is there an idea of pain to follow. This does not obliterate his desire to save the life of the stranger, although this desire may be weakened by the obstruction due to the vague wish to avoid the pain; this acting in a manner exactly opposed to that noted when the idea of pleasure to be attained in the fulfilment of a given desire increases its efficiency by the addition of the desire to gain pleasure.

Cases similar to the one here presented appear to show that the hedonist is taking too much for granted in asserting that we always act in accord with the strongest desire. It is not at all clear that the desire of the brave man to save the stranger is stronger than the desire to continue his own life in all its vigor. In fact, on its face the winning desire would seem to be the weaker of the two. In such cases we evidently act, as James says,* in the line which we distinctly appreciate to be that of the greatest resistance. That is to say, some influence from the field of inattention, *i. e.*, from the Self, appears which forces

* *Psychology*, II, p. 548.

the actvity in a direction quite opposed to the strongest desire.

SEC. 15. This analysis seems to show that the contention of the egoistic hedonist under consideration cannot be valid. It is not true that the object of desire is *always* the attainment of future pleasure; although at times the idea of this attainment of pleasure may be the desire's object. It is not true that we *always* act in accord with the strongest desire. To be sure, we frequently do; but it cannot be said that the cases where we do so indicate that we always act toward the greatest anticipated pleasure.

V

SEC. 16. We thus seem to find failing us the strongest argument of those who would uphold the more reasonable form of egoistic hedonism; and as we have found it impossible to maintain hedonism of the universalistic type, we may consider briefly in closing whether there are sound grounds for holding that effective guides to conduct could be expected to be attained if either one of these doctrines was found to be true.

All will be ready to agree that no such effective guide can be found in the principles of egoistic hedonism in its original form; for we have before us all too much evidence that one who aims to crowd as much pleasure as possible into life finds himself degraded, and of all men the most unhappy. But it is possible, as we have seen, to state the egoistic form of this doctrine in ways that have seemed to not a few acute thinkers to be conformable to the dictates of reason. Is it possible to give an affirmative reply to our question if we accept these restatements? I think not.

SEC. 17. In the first place we must remind ourselves that pleasure and efficiency go hand in hand. To attain a life of full pleasure would, therefore, seem to involve the attainment of an efficient life. On the other hand, however, we must also again recall that the pleasure gained, and the efficiency implied, in any moment relate to special elemental mental states, and to corresponding special physical activities in elemental parts of the organism. But the organism is a highly complex system of such physical elements, and, as we have already noted, we therefore have no certain guide, in the elemental pleasure of any moment, to action that will be efficient for, or will yield a total of pleasure to, the individual as a whole. The luscious sweet may prove to be a poison that will bring agony and destruction of the organism. Still more certain is it that we find in pleasure no valid guide in our moral life which is based upon our existence as social beings. If the efficiency of an elemental part of an individual has but an indirect relation to the efficiency of the individual as a whole, so it must have a still less direct relation to action that shall be efficient with relation to the social body of which the individual is an element.

SEC. 18. Again, as we have seen, pleasure relates to present efficiency only. This is indeed determined by conditions that have existed in the past, but it gives us no assurance that it points to efficiency in the future. But each moral act is one that distinctly has to do with future activities as these relate to an adjustment to new conditions. It would thus appear that pleasure cannot serve us as a positive guide to effective action; it can be employed merely as an indication of the situation with which we have to deal in the present as this affects our future action.

SEC. 19. One other point is still more significant in this connection. We have seen, to use Spencer's words again, that "pleasure is a feeling which we seek to bring into consciousness and to retain there." But we have also seen that pleasure is in its very nature evanescent; that is to say, if a given mental element is pleasant, and if it is maintained in attention, the pleasure quality attached to it rapidly wanes and gives place, first to indifference and then to pain.

It is clear, then, that if we attempt to formulate any rule looking to the maintenance of a given pleasure, and act in accord with this rule, we defeat our own object; for in following the rule we take positive steps looking to the elimination of the pleasure. It is for this reason, as I have argued elsewhere, that no rules or principles of Æsthetics can point out a royal road to beauty. For beauty is essentially a pleasure phenomenon; and, therefore, if from our experience of beauty we deduce any rule or principle by which we are able at will to repeat the beauty experience, we tend by this repetition to seek to bring it into consciousness and to maintain it there; and then the pleasure soon vanishes, and the object becomes first merely "pretty," and finally loses its æsthetic charm altogether.

Similarly it is clear that, if our motive to action in general was the attainment of pleasure, no moral rules of anything but the most temporary validity could be formulated to guide us in our conduct. They would soon lose their forcefulness, and finally would no longer be found to serve us.

SEC. 20. We may now finally ask whether we seem likely to find an effective guide to action if we accept the tenets of universalistic hedonism, or Utilitarianism.

No one would claim that the average man is guided in

general by regard for the happiness of all others of his kind. He is concerned with immediate acts. He tells us that he is guided by intuition or by intelligence, and he usually fails altogether to realize that his acts have any relation whatever to general happiness.

Moreover, it is evident that, if general happiness were made the recognized motive of action, even the most intelligent and far-sighted of men must almost certainly fail to attain the end in view. The situations in the life of the past are so complex as to be difficult enough to comprehend; and the man must be optimistic indeed who holds it possible to attain the foresight requisite to the appreciation of the new complexities that will arise in the future in connection with the new forms of activity he is called upon to perform in the moral life. We have before us all too many instances where forms of behavior by which we hope to ameliorate existing evil conditions bring unforeseen, and at times greater, sufferings in their train. Efforts to relieve the discomforts of the very poor, for example, by restrictions upon landlords looking to the better housing of their tenants, are apt to yield greater hardships, rather than less, in connection with the greater rentals the poor must pay, and the consequent reduction of what is left of their incomes to provide for food, clothing, and recreation.

In order, then, to uphold the view that an effective guide could be gained by making our motive the happiness of the greatest number one must maintain that, if we were long-sighted enough, such ineffective results would not follow. But this, of course, can be no more than an unprovable claim, and we may pass it by, merely noting that in making it we have an acknowledgment that, in our present stage of development, at all events,

the motive in question is not a practical guide for either the average man, or even for the one of keenest insight.

VI

SEC. 21. No one can read the history of the development of ethical theory without being impressed by the persistence of, and the elaboration of, ethical hedonism which we have thus considered. Surely this persistence, notwithstanding such obvious, and unanswered, objections as I have inadequately presented, indicates that those who cling to this hedonic doctrine have found in it the recognition of what they appreciate to be a fundamental truth. It means that thoughtful men have come to see that human conduct in its very nature, is what it is because, in the long run and on the whole, it tends to yield happiness for the group at large, and for the individual man so far as this is compatible with the happiness of the whole social body.

This has been a real discovery, but it has dawned upon man so gradually through the ages past that we generally forget that it has been a discovery. This is brought to our attention, however, by the fact that this same truth is emphasized by modern evolutionary doctrine, quite apart from ethical consideration. For this teaches us that the persistence of any race of animals, and among such of the race of man, must be determined by the efficiency displayed by the individual of the race; and that this efficiency in the long run, and on the whole, must carry with it the satisfaction of pleasure and of happiness. We thus find, from a relatively new source, a powerful corroboration of this momentous discovery of mankind that cannot but have effects of vital importance

in guiding the course of our studies of human affairs in all future time.

On the other hand, we must not allow ourselves to forget that all this speaks of present situations, and of situations in the past. It tells of conduct as it is, or has been, efficient; and that does now yield, or has in the past yielded, happiness. *Moral conduct, on the contrary, is an adventure in relation to the future.* It is related to adaptation to conditions that appear to be new, and is thus bound up with processes of reasoning which are the psychic correspondents of adaptation.

All this becomes clearer when we recall the fact that a vast proportion of our conduct is purely instinctive, much of it, indeed, being of that reflex type that carries with it no definite coincident in attentive consciousness. And yet for all that the efficiency and happiness of individual and race are to a very great extent dependent upon these instinctive activities.

Only where adaptation is incomplete does intelligence dawn, and as it gradually becomes definite intelligence takes on the form of reasoning. And in this process there gradually appear, more or less clearly defined, what we know as motives to action. Most of our intelligent acts, however, proceed without any recognition of anything at all like motives. Motives appear only when the process of adaptation as revealed in consciousness takes on this form of reasoning.

Now reasoning, as we have seen, is creative. It takes data given in present experience, inclusive of retrospective elements telling of the past, and undertakes to mould them to effect a better adaptation in the future. The motives to this action of future significance vary as the present and retrospective elements of experience vary.

In relatively few cases do we find ourselves consciously concerned with pleasure resultants. We are concerned with the adventure as such.

This adventure in most cases results in failure. History is filled with the records of false prophets who have led forlorn hopes. The conduct they have suggested has turned out to be inefficient and to involve unhappiness.

In some cases the adventure results in success. Then we have in the future an increase of efficiency and of happiness. Then the prophet has honor in future generations.

But prophets taken as a whole do not concern themselves primarily with efficiency or happiness. In fact, if they stop to analyze the probable outcome of the adaptation they demand, they must as a rule see that the conduct they suggest will result in the change into inefficiency and unhappiness of what has brought, and still does bring, efficiency and happiness to vast numbers of men. This is the meaning of the fact that prophets are proverbially dishonored in their own times and countries; are persecuted, even to death. The people to whom they appeal are rendered unhappy and strive to rid themselves of the source of their discomfort. And this is true as well where the adaptive conduct they suggest is not destined to prevail; as well as where it is destined to prevail, thus yielding in the end greater efficiency and greater happiness in the future. We are wont to overlook the fact that false prophets, as well as true prophets, suffer persecution at the hand of those whose habits of life they disturb.

All of this indicates that the attainment of no single end can be held to be the universal motive to conduct.

The motives vary from individual to individual, and in each individual from moment to moment. This means that in the moral life we deal with a process of experiment, of adaptive adventure, which has its own driving force, quite apart from the picture of future consequences. We deal with a balancing of motives, and the forces that go to determine which of contradictory motives shall prevail. In other words, we deal with the functioning of reason in the moral field, and to the consideration of this subject we shall turn in the final chapter to follow.

CHAPTER VIII

INTUITION AND REASON

SEC. 1. In the preceding chapter we have made a study of the guide to conduct suggested by our appreciation of the intimate correlation between modes of behavior on the one hand, and efficiency and happiness on the other; and we have been led to see that, although we must consider this efficiency and happiness of individuals, and of groups of individuals, as important data for our consideration, nevertheless in the end each individual finds himself looking to reason as his guide as he weighs and balances the motives which appeal to him. These motives vary from individual to individual, and in each individual from moment to moment, and this serves to indicate that no single end can be discovered the attainment of which will serve as a universal motive to conduct.

We are confirmed in this view if we consider other attempts than those of the hedonist to discover a single motive of universal application.* Only a minimum of the motives that present themselves to even the most

* Let us consider as a case in point the suggestion that a single guide to conduct may be found in the effort to serve the realization of the worth of all unique personalities of which the individual who accepts this guide is but one; a view that has been presented in a most persuasive form by Dr. Felix Adler, in his *An Ethical Philosophy of Life*. "Act," he tells us, "as a member of the ethical manifold (the infinite spiritual universe). Act so as to achieve uniqueness (complete individualization—the most completely individualized act is the most ethical). Act so as to elicit in another the distinctive, unique quality characteristic of him as a fellow-member of the infinite whole" (p. 117). "The moral equality of men is a corollary of the attribution of worth to all men" (p. 91). "Act

thoughtful man have anything like a universalistic reference; few of them involve more than the consideration of the individual's relation to a small group of men with whom he is in close social contact, and very many of them have personal reference only. In each case we find upon analysis that the individual when he is hesitant determines his conduct by a rational process which is a purely personal affair. He is engaged in an individual adventure, and it is the success of this adventure that he has at heart.

Each one of us in his moral acts is aiming to avoid evil,

upon" the "empirical selves" of other individuals "in such a manner as to draw from their empirical natures the hidden personality or at least the consciousness of it" (p. 222).

Inspiring as this conception is, it meets with difficulties similar to those brought to light in our study of hedonism. If we attribute worth to all men and agree to the moral equality of men, we are faced with the fact that we must act to elicit in the savage, and in the criminal, and even in the imbecile, as well as in men of the highest type, "the distinctive, unique quality characteristic of him as a fellow-member of the infinite whole"; for we have no ground for drawing a sharp line of distinction between the base and noble of mankind. Each individual finds himself justified in action in accord with what is for him his "better self." But this "better self" in the savage, in the criminal, and in the mentally infirm, is surely not one that any man of full moral stature can consider to have equal worth with his own "better self." Nor, in fact, does any one who holds this or a similar view make attempt to take all men into consideration in determining his conduct. He may broaden his sympathies in the widest measure, but his moral judgments must be based upon the consideration of the conceptions of only a small group of those men whose modes of thought are closely allied with his own. In truth the moral man, be he of broad or narrow outlook, feels himself bound to treat a vast proportion of men as of unequal worth. He feels it his duty to aim to enforce his own better standards of life upon these others; to discourage those whose standards appear to be lower than his own; to obstruct in them "the distinctive, unique quality characteristic of him as a fellow-member of the infinite whole."

to choose the better way; he is thus making an experiment looking to a more perfect adjustment of his life to the conditions in which he finds himself placed. In determining the nature of each act the individual deals with diverse impulses which vary in width of application and therefore in permanency of appeal. The more permanent of these impulses are those that relate to broader systems of which the individual is an element. The individual is an elemental part of the universe as a whole; he belongs to the narrower group of living beings on this planet, and within this group to the still narrower group of animals, and to the still narrower group of men within the animal group. Again within this human group he is an element of various subsidiary groups of men who are bound together in the fact that they entertain certain ideals and aims in common. And finally he exists as an individual with his own peculiar needs and desires.

As the result of his existence as an individual, and at the same time as an element of more or less broadly systematized groups, there appear in him a variety of impulses to action. On the whole the impulses of purely individualistic significance, although less persistently pressing, are likely to be more forceful than those relating to the groups to which he belongs; and the broader the group which yields the impulse the less forceful, although the more pervasive and persistent, the impulse is likely to appear. If the individual's personal adjustment to the situation of the moment is to be adequate, therefore, it is necessary that the more forceful but less persistent impulses be curbed, in order that the less forceful but more persistent impulses may develop their full strength. Thus we find in man the "inner check" that is the very basis of our moral life.

Each individual thus finds himself dealing with a variety of motives to action, some due to his existence as an individual, others to the fact that he more or less clearly appreciates his group relations. These motives are, in general, most clearly defined where they have reference to himself as an individual. Where they have reference to the groups of which he is an element they become less and less clearly defined as he broadens the group held in consideration, gaining definition in proportion to his comprehension of the nature of the special group thought of and of his sympathy with the ideals it maintains. Thus it is that we deal in our moral life with a balancing of motives to action, which are more or less forceful, and more or less persistent.

But each individual is unique, and this just so far as there is an uniqueness in the nature of his impulses and of the motives which become defined in thought. Thus under the changeable conditions of existence which prevail in the lives of men it would seem to be utterly impossible to discover any single ubiquitous motive relating to the individual man who is unique, or to any special grouping in which the individual is an element, that can be always supreme for any one unique individual. And if this is true of the unique individual, it is surely impossible to imagine that any single supreme motive can be found that will always be applicable in the guidance of the moral conduct of this grouping of unique individuals which we describe as mankind. This very uniqueness of the individual would thus seem to negative the possibility of the establishment of any single rule of conduct that can hold for all men alike.

Each man, if he is to act morally, is bound to act in accord with the nature of what he pictures as his own

best self; in other words, to enforce those impulses which he finds to be most persistent, to emphasize those motives which in his moments of deliberation he wishes might become permanently influential in the guidance of his conduct. It is the life governed by these ideal impulses and motives which he calls his "spiritual life."

We may turn, then, from the study of special motives to the consideration of the process by which any special motive is rendered effective in the guidance of conduct.

SEC. 2. That we are often guided in our conduct by reason is recognized unhesitatingly by all men. In fact it is very commonly held among the less thoughtful that man is differentiated from other animals just in the fact that he alone is a rational animal; and this notion is still clung to notwithstanding that the scientific observer finds it impossible to draw any line of distinction between the intelligent activities of man and those of animals; and notwithstanding that it is now generally realized that most of our conduct shows the marks of instinctive behavior which of old was supposed to be the mode of action marking off animals from the members of the *genus homo*.

But there is another well-recognized guide to conduct in what we call intuition, which the average man takes to be quite diverse from and often opposed to reason, and equally authoritative.

Of the nature of intuition I have spoken in Chapter II, where we noted that the term is legitimately employed to relate to both the realms of knowledge and of impulse. It is most commonly, however, looked upon as a category of the understanding, and is so employed here.

As it happens, the most prominent opponents of hedonism have made much of the guidance by intuition, with

the result that all those who reject hedonism are commonly counted among the intuitionalists. This is far from logical, indeed, for one may acknowledge the significance of the guide of reason without accepting hedonistic interpretations, and this I think we are bound to do. At all events, it is a matter of common experience that these two distinguishable guides to conduct exist, and we may therefore consider the modes of functioning of each in turn.

I. *Of Intuition*

SEC. 3. In our previous study of the nature of our intuitions we have noted that the behavior correlated with them is markedly immediate and non-hesitant, being in this definitely distinguishable from that correlated with rational processes, which is mediate and hesitant. We have also seen that these non-hesitant activities appear where the conditions surrounding the animal are such as have occurred frequently in the life history of the individual, and usually of that of the race to which he belongs.

When we turn to the psychic view we find that there usually exist in the field of attention no antecedents to these non-hesitant activities; we are indeed accustomed to speak of a large part of them as "unconscious." We have seen, however, that this merely means that the psychic changes which occur in connection with them are completely within the psychic mass of inattention. We have an example of such behavior in the ordinary activities connected with breathing. Such being the case, it of necessity follows that motives to thoroughly non-hesitant activities are not observable.

When, however, we *reflect upon* the mental states coin-

cident with such thoroughly non-hesitant behavior, we at times find ourselves able in retrospect to obstruct them in a measure, to slow them down, so to speak; and when we do so we often find the image of a mental state antecedent to the act, and indicative of what the nature of the act is to be. This imaged antecedent we find to be an intuition.

When I take no pains to speak with the person introduced to me, I may appreciate no motive to account for my turning away from him as soon as politeness permits; but if my hostess asks why I did not take advantage of the opportunity offered to me I reflect, and then am likely to say that I had an intuitive distrust of him. My intuition is thus looked upon as the motive guiding my action.

SEC. 4. Certain of our intuitions seem to be given to us as attributes of inheritance, as bound up with truly instinctive tendencies. Thus I may say that I was guided in my conduct toward the stranger by an intuitive distrust of him which cannot be traced to any deduction from previous knowledge of his character.

Other of our intuitions are very evidently based upon the experiences of life, and are bound up with those *pseudo*-instincts which we describe as acquired habits. The individual who has been educated under strict puritanical influences has an intuitive repulsion to engage on the Sabbath in certain pursuits which are quite normal for those of Latin blood.

SEC. 5. Where an intuition presses for recognition, in opposition to a clearly defined impulse or desire looking to conduct having an immediate end in view, we speak of it, when we view it in reflection, as the voice of conscience.

Charles Darwin in his *Descent of Man* threw a flood of

light upon the nature of conscience when he showed that it consists of the conscious protest of a more enduring instinct against its inhibition by a less persistent, but for the moment more powerful, instinct. In this he displayed rare insight, and his contention cannot be disputed if we agree to cover by the term instinct those *pseudo*-instincts which we discover to be due to habits acquired during the life of the individual, as I think we may well do.

Darwin held, however, that the more enduring, but at the moment less powerful, instincts referred to are those that relate to social rather than to individualistic values; while the less persistent, but at the moment more powerful, instincts relate to these individualistic values. He thus argued that the moral pressure of conscience could always be traced back to social demands. Without question his argument holds in the main; but as evidently, if his insight is correct, the essentials of conscience will be given if the more enduring instinctive tendency happens to have individualistic rather than social value. That such is the case at times, however rarely, is evidenced in the fact that we have the experience of conscience leading to acts of individualistic import in opposition to powerful social pressure; a man then is wont to explain that "he owed it to himself" to act as he did.

At all events, the fact remains that conscience is the intuitive guidance given in favor of more enduring tendencies, as against momentarily more powerful, but less persistent, ones; and it is equally clear that conscience, in general, points to broader than immediate individualistic values.

The "voice of conscience" is a cry of protest from our deeper nature against action to which we are called by urgent demands in the present. It arises from the field

of inattention which is the Self. It is a protest by the Self. Thus it is in general conservative; for, like all intuitions, it points to the teaching of past experience.

This statement may seem, at first sight, to mean that conscience is never creative; may seem to deny that it "seeks out its own applications and is capable of development"; * a fact that no one can hesitate to accept. It must be recalled, however, that creativeness, under our view, is a general characteristic of our psychic life, and therefore of our intuitive impulsions; this being especially clear in the very fact that they emanate from the Self in whose action, as imaged in the action of the empirical ego, we have our strongest evidence of subjective creativeness.

SEC. 6. It is evident that the intuitive guidance of conscience cannot be given unless the individual has developed the habit of delaying reaction to a stimulus until the less powerful, but more enduring, impulses can become effective. He must become subservient to that "inner check" of which so much was made by the philosophers of the East, and which was taken over from them by Emerson.

In another connection † I have been led to make the suggestion that the function of religious expression in the development of our race is in the direction of the emphasis of conscience. Religion under this view cannot do more than bring into prominence such moral standards as the religious man has already acquired. It cannot create new and higher standards. The perfecting of moral standards can only result from the careful balancing of motives, and this must necessarily be the outcome

* *Cf.* Hocking. *Human Nature and its Remaking*, p. 96.

† *Cf.* my *Instinct and Reason*, especially chaps. X, XIV, and XV.

of rational processes. We have ample proof of this in the man of marked religious fervor, who clings to vices that held him fast before his conversion. The mood of self-contemplation encouraged in the religious experience may indeed lead to this balancing of motives which leads to the perfecting of moral standards, but this can be no more than an indirect result of the religious life.

SEC. 7. As we have seen, the consciousness of an individual, in any moment taken for consideration, is a vastly complex system of psychic systems of psychic elements. That which appears in the field of attention is thus an emphasis within a more or less complex minor system which is stimulated by forces which do not at once yield a response from the system as a whole. Thus this psychic emphasis stands over against the whole body of consciousness apart from the system emphasized, and appears as a presentation to this rest of consciousness which is the Self of the moment.

Our intuitions are such psychic emphases, or presentations, but they are vague, and lacking in definition. Where we experience within the field of attention a clear leading to immediate reaction which is opposed to the vague pressure of an intuition, this clear leading is also a presentation. It is a marked emphasis in a narrower minor system within the whole of consciousness. The vague intuition, on the other hand, is a less powerful emphasis in a minor system of much greater breadth. The intuition would thus naturally appear to rise out of the broad field of inattention which we call the Self, and to be indicative of its general nature as distinguished from that of the partial system involved with the clear leading to reaction. In other words an intuition would thus seem to be indicative of the nature of the Self as this

is represented in the presented ego of the moment. And this view is corroborated by the fact that intuitions seem peculiarly our own, and independent of extraneous influences. The forms of intuition experienced by an individual thus indicate the qualities of his being that fix what we call his character.

SEC. 8. Where intuitions are fully, or in the main, due to our nature as given to us by inheritance, they tell, as we have seen, of situations that have been common in the racial life of man in the past. Where they are *pseudo*-instinctive, *i. e.*, due to acquired habits of thought and action gained by individual initiative or under educational guidance, they tell of the past experiences of the individual rather than those of the race. Intuitions that are due to inheritance are thus seen to point more certainly to broad values than do those that are based upon the life experiences of an individual.

In the one case, as in the other, however, our intuitions can tell us of the past as it is related to the present situation, and only of the past as thus related. But each moral issue is a new issue, involving the relation of the present to the future, in connection with adaptive activities which have their correspondents in the field of intelligence and reasoning. It seems evident thus that intuitional guidance can only be considered as elucidative of the nature of the present situation with which we must deal in connection with the future. The import of this will appear later.

SEC. 9. It is to be noted that our intuitions are relatively stable in their nature, as the Self from which they emanate is relatively stable. This indicates that changes in the form of moral impulsions must be derived from other sources than our intuitions; and this again makes

it clear that the perfecting of moral standards must be a matter of the weighing of balanced motives in the clear light of intelligence; or, in other words, that the most significant forms of the guidance of conduct must be found in the realm of reason.

The individual who habitually trusts to the guidance of his intuitions, without that control of them which is found only in connection with intelligent self-criticism, cannot hope to gain new moral insight, nor to make such adaptations of his conduct to meet new conditions as is necessary to man's moral advance.

II. *Of Reason*

SEC. 10. When we turn to the consideration of the guidance of conduct by reason, we may well at the start note again what happens in our experience in connection with this intelligent guidance; even if this involves a certain measure of repetition of what has been already said.

Intelligent or rational behavior is non-immediate and hesitant. It is the correspondent, as we have seen, of the emphatic stimulation of a partial minor nerve system within the whole complex nerve system, which partial system develops an activity that cannot instantly be coordinated with the activity of the nerve system taken as a whole. On the psychic side correspondingly we have the emphasis of a partial psychic system within the whole of consciousness, which partial system tends to develop, but cannot do so instantly, because such development involves a readjustment of the situation in consciousness taken as a whole. It is this readjustment that constitutes intelligence, which in its most clear-cut form is known as reasoning.

In cases where this readjustment is delayed, and the

conscious emphasis is persistent, we tend to appreciate, as we have seen, as antecedent to the act, either what we call an impulse to act, or a desire to realize the unrealized idea presented in attention. If the foreseen reaction occurs, or the unrealized idea is realized, the impulse, or the desire, instantly dissolves away, so to speak. If this does not happen, we appreciate its nature as a complex presentation consisting of a vague sense of obstruction, and also of an idea of a consummation in the realization of the act in the case of impulse, or in the unrestricted development of the idea in the case of desire; and this idea of a consummation we look upon as the motive to the form of behavior it involves.

Where this situation is persistent the impulse is finally entirely displaced by the desire, and in most cases which attract our especial notice the vague sense of obstruction gains definition, and out of it then appears a contradictory desire. Then we have in attention two ideas, both of which are appreciated to be unrealized, and assumed to be realizable; the realization of either one, moreover, being incompatible with the realization of the other. Hence the clash of desires yields a clash of motives.

SEC. 11. This clash may be resolved, as it often is, by the rapid strengthening of one of the contradictory desires, and the weakening of the other, which latter quickly disappears. The desire to eat a piece of fruit placed before me stands in opposition to the desire to conform to the usual canons of decorum, and the former desire yields, as it were, to the other without apparent resistance, and disappears. But why does it thus yield? Evidently because the idea involved in the satisfied desire is able to assimilate, more readily than that involved in the one that disappears, with the body of conscious-

ness as it exists apart from either idea. And this body of consciousness under our view is none other than the Self of the moment.

That such is the case becomes clear in those cases where the conflict of the two ideas involved with the desires is so prolonged that this conflict itself becomes a marked object of attention. Then we recognize that the Self resolves the conflict by an act of will. We choose to realize one or the other of the two opposed courses of action to which we are impelled, or to realize one or the other of the unrealized ideas involved in the contradictory desires.

SEC. 12. In a large proportion of such cases of persistent conflict the desires are lost to view, and attention is concentrated upon the ideas involved in the conflict. Then we experience the state of doubt in which the free development of each of the two ideas is appreciated as being inhibited by the tendency to development of its incompatible. The conflict of doubt is always resolved, as we have seen, by an act of the Self in willing; and when we thus act we have the experience of believing. We always will to believe.

The significance of this fact lies in the control of the act by the Self in which, as imaged in the empirical ego, appears the most marked appreciation of psychic creativeness. This control is gained as the result of the hesitancy which enables the psychic system as a whole, *i. e.*, the Self, to assimilate the one of the two conflicting ideas that most fully conforms with its whole nature.

The gain of the tendency to hesitancy, to a nice balance of motives, is thus seen to be most important to moral advance. Without it a man's moral standards tend to become rigid and unadaptable; with it goes the capacity

to the development of new standards which is of the essence of moral growth.

The "inner check" which involves this hesitancy, as we have seen, forces into prominence what we know as the voice of conscience which brings to view the more permanent characteristics of the Self. And such situations allow full scope for the working of the Self's creativeness, leading to acts that apply to unusual conditions, and yielding adaptations to fit such new moral situations as arise.

SEC. 13. Such hesitancy involves doubt, and we are thus led to see that a measure of development of doubt is to be encouraged. To be sure, where this hesitancy involves paralysis of action that is of vital significance, we are justified in breaking it by making a choice of one of the alternatives, even if the grounds of this choice cannot themselves be clearly rationalized. This was the main contention of William James in his famous essay, *The Will to Believe*, which he often said he should more properly have entitled, *The Right to Believe*.

On the other hand, the case of the man who avoids all doubt is morally hopeless. He is little else than a slave of others whose lead he follows. He stunts the growth of his character by giving but a minimum of scope for the functioning of his creativeness. In doubt and its resolution we have our main hope of discovering such moral readjustments as are necessary to man's advance in righteous living.

III. *Intuition versus Reason*

SEC. 14. The common man assumes, and the thoughtful one is very generally ready to assert, that we have in reason the final arbiter in matters of conduct. We

have been led by each step in our inquiry to see that this view is justified; for so far as conduct is guided at all it is concerned with adaptation to meet special conditions, and the mental correspondent of adaptation is intelligence, of which reason is the most significant form.

Nevertheless, there have always been those who would discredit the guidance of reason. Not only do we hear this from the mouths of the mystics, who again and again appear in the religious and philosophical fields, but also among the common people in all eras that have been dominated by what we speak of in modern times as the spirit of romanticism.

Not long since I overheard a thoughtful and influential professor of law saying: "As the result of my mature deliberation I have come to believe that reason is the least trustworthy guide to conduct," thus voicing the thought of not a few of those of our day who urge us to leap to action in accord with the impulse most prominent in mind at the moment, even where we dimly realize the abysmal darkness that confronts us ere we leap.

Such words as I have quoted above, however, appear upon examination to involve a clear-cut case of self-stultification; for it is to be noted that our speaker acknowledged that his conclusion had been reached "as the result of *mature deliberation*," which is necessarily a process of thought, in this case involving conscious reasoning. Here the thinker consciously examined the supposed results following upon subservience to various guides to conduct, and rationally evaluated them. Bergson has tricked himself in no dissimilar manner, for in his subordination of intellect to intuition he surely has employed intellectual means to devise and sharpen an intel-

lectual tool, with which he, in the end, aims to commit intellectual suicide.

And these are but instances serving to draw to our attention the existence of a current which, with well-nigh irresistible power, sweeps from their moorings the thoughtless and careless; who, bewildered and hesitant, find a delightful relief from strain in "letting themselves go," at the same time comforting themselves with the assurance that their intellectual superiors tell them they are thus choosing the better way.

When we study this situation thoroughly, however, we become convinced that statements similar in form to that above quoted are really made in order to receive the approval of reason itself; made because of a desire to give an appearance of rationality to courses of action that have been adopted quite apart from "mature deliberation." Where such situations are not the mere results of the imitative acceptance of dogmas held by those who forcefully influence our lives, they are usually due to the careless acceptance of the first means that suggests itself as adequate to remove a disconcerting sense of perplexity. In the case before us we watch the activities of men in their efforts to adapt themselves to the conditions of life. We see the majority reacting without forethought, and apparently, on the whole, reacting effectively. We see the minority who deliberate, at times after hesitancy reacting ineffectively, and this is so disconcerting and unsatisfactory that we are led to take the position here considered in order to avoid our perplexity.

But why are we disconcerted when we find rationally guided conduct ineffective? Surely it is because we have come to believe that action after deliberation ought to be effective; we expect it to be effective, and are disap-

pointed. And how does it happen that we have come to hold that action after deliberation ought to be effective? Surely no such expectation could be entertained unless it were based upon actual experience that tells in its favor; unless, in other words, it were true that rationally guided action appeals to us as on the whole effective rather than ineffective.

This leads us to suspect that the failures of effectiveness noted in connection with deliberative action impress us so forcibly that we overlook the more frequently experienced, but less emphatic, cases where deliberation results in effective action; and we are thus led to ask whether we are justified in our further assumption that immediate reactions without forethought are generally effective. Do we not pass over too lightly many cases where such non-rational action is altogether ineffective? Is it true, in other words, that on the whole the man who "lets himself go" in reacting without forethought is likely to prove the more effective man? Would it be agreed, for instance, that he who yields to every intense sexual impulse is a more effective man than he who stops to consider the possible results of his indulgences, and who guides his sexual conduct by "conscious reasoning"? I think not.

Those who defend the position here criticised forget that the non-deliberative actions are what they are because of inheritance or acquired habit, which determine their immediacy; that they thus speak of the experience of the past, in the race or in the individual; that they are non-hesitant, and consequently non-deliberative, merely because they have been effective in that past; and that they are effective in the present only so far as the conditions now met are approximately the same as those experienced by our ancestors or ourselves in the past.

They also forget that hesitation would not appear, and deliberation would not be suggested, were not the conditions now met relatively new.

Argument is not required to show that a more perfect adaptation to new conditions is of the essence of human advance. Nor do we need to note again that such adaptation involves that hesitancy in reaction which is the accompaniment of deliberate attempt to guide the direction of reaction by rational methods. When one holds, therefore, that, on the whole, the majority who react without forethought react effectively, one really means that the majority of reactions are without attempt looking to the adjustment to new conditions necessary to man's advance. But when one steps beyond this and holds that "the least trustworthy guide in matters of conduct is conscious reasoning," one is in reality holding that, on the whole, no such adjustment to new conditions is worth while. Or, in other words, one teaches that all efforts to advance toward perfection are pure and unadulterated folly, a doctrine that the most perplexed of us will scarcely be prepared to accept without very serious questioning, and one that the careful student must promptly reject.

SEC. 15. All this brings forcibly to our attention the fact that there are not a few experiences of life which present to us a nice balance between the pressure of intuition and the dictates of reason. For instance, I am assailed this morning in the street by a number of persons soliciting from me money to support the efforts of the Salvation Army in alleviating the sufferings of the poor in France. The sympathetic feeling which presses me to give is an intuitive guidance easily traceable to the social instincts that are part of my nature. Against them,

however, reason presents the fact that the petitioners are unknown to me, and that I cannot be sure they will not use the money I give for their own advantage. This is a case where my intuition is traceable to racial experience of the social value of sympathy.

Again, my intuition leads me to distrust the man who comes to me with a business proposition, although his introductions, and all the inquiries I make, tell me that it would be irrational to treat him in any other manner than I would treat one whom I was convinced to be the soul of honor. This is a case where the intuition seems to hark back to inheritance; although, when I think of it, it appears quite possible that my distrust may be based upon some superficial likeness to some unremembered man who has abused my confidence in the past; in which case the intuition is clearly of less significance than it would be had it been due to racial, rather than to personal, experience.

Or, again, take the case of one of my friends among the clergy, who in youth had always been brought up to the strictest observance of the Sabbath, which involved the avoidance on that day of all that looked like play; and who had also been taught that card games were evil. He, having been invited to spend a Sunday afternoon with a well-known and unquestionably pious pastor of a church of his own denomination in Paris, was shocked to find himself asked to join in a game of whist. Here was a case where the intuitional guidance was quite evidently due to the special educational influences of his life. It stood opposed by the rational plea that "the sabbath was made for man, and not man for the sabbath," and that recreation was not in itself an evil to be avoided on that day of rest.

In all these, and in many similar, cases the intuitional guidance stands balanced with the guidance of reason; and the question arises which guidance shall we follow.

SEC. 16. It is clear in the first place that we cannot overlook the significance of the fact that the intuition tells of the experience of values in the past. This significance is greater if the intuition can be traced back to the experience of the race through inheritance, and less if it is seen to be merely traceable to habits of thought, self-acquired, or pressed upon us by the teaching of others. Nevertheless, the intuition always tells us of values maintained in the past which we must take into consideration, for they indicate what may be important characteristics of the situation with which we have to deal. They then become part of the data with which reason is concerned to work.

Having them thus in mind, however, we are fully warranted in action in opposition to their guidance, if reason calls for such action. We must indeed acknowledge that we are thus stepping into untried paths, that we are making a moral experiment which our intuition tells us is not in a direction that has had value in the past. We take our moral life in our hands, so to speak. But we are surely justified in so doing, for only by such experiment can we hope to bring our conduct into better adjustment with the conditions of life as they now exist. It were moral cowardice not to take the risk involved.

SEC. 17. In order to illustrate my meaning let me state the manner in which I should incline to act in the several cases above referred to, with no intention of indicating that my resolutions of the conflicts involved ought necessarily to have general appeal.

Taking the instances in reverse order. I, myself, was

brought up under the strictest Sabbatarian influences. I cannot to this day attend a concert, or play a game of any kind, on Sunday without feeling a twinge of conscience. But I have come to realize that this special form of conscience has been artificially built up under the conditions surrounding my early life, and has no more than individualistic significance. I have also come to see that under the pressure of modern existence recreation is of profound value; and that, if it can be attained only on Sunday, it is best for me to act in opposition to the intuition that would prevent me from obtaining this recreation.

In the case of the person who is intuitively distrusted, I agree that most people would think themselves justified in accepting the guidance of their intuition. But, having given much of my thought to psychological studies, I have come to see that the most fortuitous of associations may go to make up the impression made upon one man by another; and I myself, while made watchful by the intuition, should allow my action to be guided as it would be had no such intuition obtained.

In the case of the solicitor of alms, the situation is somewhat more doubtful. William James and I were walking together one day on the streets of New York when we were approached by an evidently tipsy, and thoroughly wretched-looking, beggar. I refused to listen to his appeal, but felt, as I always do under such conditions, a protest from conscience. I, however, had been an active worker in the Charity Organization Society, and had learned to think that the encouragement of street begging was a very great evil, as it led to the demoralization of the poor we would fain help. James, however, instantly took a coin from his pocket and gave it to the poor wretch; and, when I expressed my surprise,

said he had thought this all out, and had concluded that while it might possibly do some small harm to a beggar to give him what he asked, it would be certain to do himself greater harm not to give, for this failure to give would tend to lessen the strength of his sympathetic impulses.

SEC. 18. Let us take another case where the balance is still more perfect. A man and woman having married hastily find not only that they themselves are mutually incompatible, but that each is in love with another than his or her lawful mate. Reason may suggest that it is absurd to be faithful to the marriage vow. Intuition demands this faithfulness. This intuition seems to be based upon the experience of the race in its struggle to foster the responsibilities of parenthood. The claims of reason in favor of eliminating unhappiness, and replacing it by happiness, are powerful; and the courts have formulated rules for divorce which make separation and remarriage possible. On the other hand, the Roman Catholic Church, for instance, enforces the intuitive guidance by treating marriage as a sacrament, and denying the validity of any divorce.

Here the question turns largely upon our comprehension of the significance to the race of the intuition, and of the evils which it has been evolved to overcome, as compared with the evils of the existing situation. Thoughtful men are still in doubt. Do we understand the full meaning of this intuitive warning from the experience of the past? May not the evils attendant upon legalized separation be eliminated by some rational device? The questions at issue here are so complex that the most highly moral men differ widely in their judgments.

SEC. 19. In closing we may consider certain special cases that are of interest to all of us, and especially so to

those who devote their lives to the service of the community through the instrumentality of the established churches.

As we have seen, the activities connected with the teaching of the young by their elders have acquired an instinctive character, and their efforts yield results in the developing man that have all the recognizable characteristics of instinct-actions. Examples of such immediate non-hesitant actions we have in countless number, from the teaching of the chick to drink, to the gradual education of the growing girl to modes of conduct that will eventually fit her for the care of her own children in the future. We find them also in the religious ceremonial of barbarous as well as enlightened men.

As we have also seen, when we stop to reflect upon such actions, and ask what is their driving force, we find in consciousness an antecedent intuition which we think of as our motive to act. In certain cases we formulate these habitual modes of thought, and then we are wont to call them "beliefs," which we look upon as intuitively given. Beliefs are thus named, as we have seen,* because the ideas referred to are so real for us that any question of this realness is at once rejected in an act of believing. To take a somewhat trivial instance, most of us through long training have a belief in the existence of the Gulf Stream as depicted on the maps studied in our youth; and this belief urges us to certain forms of action in relation to choice of routes in crossing the Atlantic. When some scientist tells us that this Gulf Stream is a myth, most of us instantly reject his statement as unworthy of consideration; we may, indeed, listen of an evening to his arguments in support of his position which we are entirely

* *Cf.* chap. III, sec. 14.

unable to controvert, but when we awaken the next morning we are likely to find that our "belief" in the Gulf Stream has not been shaken.

Here we are dealing with an intuitive belief that is based upon the teaching of little more than a generation of men. But we are possessed of very many beliefs that are due to teachings given to men through very many generations. Such are the beliefs that support the *taboo* among unenlightened men; and, taking a great leap, such are the beliefs expressed in the creeds of the modern churches, clung to by the most enlightened of mankind. When question is raised as to their validity, the average man at once rejects the incompatible suggestions, and experiences the act of believing.

SEC. 20. In connection with the line of thought we have been following, question is raised as to the attitude that should be taken when such intuitive beliefs are brought to our attention by oppositions developed through processes of reasoning that cannot be controverted.

In the first place, it is to be noted that the nature of these beliefs is very likely to change materially as the mere result of our mental development. I imagine that every mature reader of these lines will agree that the God in whom he believes to-day has not the same characteristics attributed by him to God in his early childhood. Evidently, however, the truth that is pointed to by beliefs of this general nature does not change; it is we who change as we develop, and who in the process are bound to discover new expressions of the truth. Were all children taught to look forward to the perfectly certain changes that must occur in their insight as they develop, many a youth would be enabled to escape the shock of revulsion from belief to utter unbelief experienced in

many cases as he gains in knowledge; a shock carrying with it despair, and often consequences of serious moral evil.

SEC. 21. That there is truth as the basis of the intuitive beliefs to which we here refer is as certain as is the fact that there are variations in the modes of our insight, and in the manner of our expression of the import of that insight. It is inconceivable that a belief that has persisted through many generations can be other than an expression of some truth, however faulty this expression may be. Were it based on positive and complete untruth, its evil consequences would have long since led to its abandonment. Moreover, the fact that it has persisted is an all but certain indication that it is the embodiment of a truth of value; for the chance that it may be but a by-product of some other truth whose expression may have become fortuitously attached to it becomes the smaller as the persistence of the belief from generation to generation becomes greater, and may be entirely overlooked where there is evidence that the accompaniments of the belief have value to the one who entertains it, as is usually clearly the case with the beliefs referred to here.

SEC. 22. It often happens in our experience that the clear leadings of reason are found to stand in opposition to the acceptance of some of the most cherished of such beliefs of ours. What, then, should be our course of action? Should we abandon our beliefs as worthless? I think not. We must note that they voice the appreciation of truth as it has appealed to some of the best of men in the long past. It were thus absurd to cast them aside as unworthy of attention. At the same time we must agree that human thought can at best express only

approximately the full truth in any special direction, and must agree that the doubt raised by reason is in itself a proof that the expression suggested in our belief is inadequate.

If this position is accepted, then it must be agreed that for those who appreciate the seriousness of the questions at issue it is a duty to face from time to time the re-expression of truths that come to them clothed, as it were, in well-established conceptions, in dogmas, in beliefs, which nevertheless give rise to questionings drawing attention to their inadequacy as expressions of truth.

One who undertakes such a task should not, however, do so lightly. He should never attempt it without a full recognition of the fact that such re-expression as he may aim to make may prove to be utterly inadequate. For where a given expression of a truth has long persisted, it is certain that in many respects it has proved adequate; and before we can hope to gain a new conception, the acceptance of which may justly be urged in the place of the old, many an attempted re-expression must surely be expected to be found unsatisfactory in unforeseen particulars.

We must acknowledge that in making such attempts at re-expression we are dealing with pure experiment. But on the other hand we must agree that it would involve moral cowardice if we refused to take the risk involved in this experiment.

APPENDICES

APPENDIX I

THE CAUSAL RELATION BETWEEN MIND AND BODY

I

Let us return to the consideration of the question as to the propriety of the application of the causal relation to mind and body which I waived in Chapter I in order to avoid obscuration of the drift of our thought.

We may note in the first place that if the relation between consciousness and behavior is a causal relation, it seems altogether improbable that the generally accepted notion is correct that sometimes consciousness causes behavior, as in the will-act; and that at other times behavior causes changes in consciousness, as in the case of the correspondence between indigestion and despair; improbable, in other words, that the common view is correct that the causal relation applies in a haphazard manner.

We are thus led to entertain for consideration two opposed hypotheses: (1) That behavior always causes consciousness, and (2) that consciousness causes behavior, except so far as one type of behavior directly causes another type in a regular mechanical sequence.

In connection with each of these conceptions formidable difficulties appear, which it would be inappropriate to consider here in detail. I may refer the reader who is interested in the close study of this aspect of the subject to Charles A. Strong's *Why the Mind Has a Body*, and shall content myself with the mention of a few of these difficulties that are typical.

In the first place we may note that there is a very general hesitancy among philosophers in accepting the view that we are justified, in our defense of either view of the causal relation, in passing from the psychic field to the physical field, or from the physical field to the psychic field. This is doubtless due to the fact that the usual experiences which lead us to the conception of a causal relation, occurring as they do in our observation of objects in the outer world, involve a clear oneness of field, while there is felt to be a

very marked diversity between the physical and the psychical fields. As I shall presently argue this hesitancy is warranted on different grounds.

The notion of the causal relation as employed in every-day life is, in my view to be defended below, based upon our experience of uniformity of succession as observed in the objective world, and has been developed only as the result of repetitious experiment which discloses the uniformity. But, as Mr. A. A. Merrill has lately pointed out,* the mental situations that are looked upon as effect in the one case, and as cause in the other, are not subject to such repetitions of experiment.

Taking up first the supposition that mental events cause behavior events, we note that this view is based upon our experience of what we call voluntary movements, *i. e.*, active movements *following upon* the mental events which we describe as acts of will. Now it is to be noted that the causal conception as based upon our appreciation of succession involves the correlation of two *immediately* successive events; one the cause, the other, the effect. But if we look upon the volitional act as causing an arm movement, for instance, we are dealing with a long series of events, in brain, nerve, and muscle, separating the supposed cause from the supposed effect. It may be claimed that the volition acts only on the brain, and that all of the other events inclusive of the movement are purely mechanical; but this is a mere assumption that masks the difficulty, for our evidence is limited to observation of the volition on the one hand, and of the far separated movement on the other.

Turning to the supposition that bodily behavior causes the mental state, we note the stimulation of a nerve terminal followed by a sensation. One may say that everything is mechanical until the occurrence of the brain event which causes the sensation; but evidently we have no evidence whatever to indicate that the sensation *follows* the brain event, as is usually implied in our notion of causation. If it does not follow the brain event, but is simultaneous with it, our experience would be the same, and then the causal relation would not seem to apply.

Again—in our observation of the outer world we find a succession of causes and effects, each effect of one cause becoming in turn a cause yielding a new effect. But where we suppose that the

* *Journal of Philosophy*, XV, 11.

bodily behavior, in this case the brain event, causes the mental state, we have in this latter an effect which closes the series; the mental-state effect does not in its turn become a cause.

These and similar difficulties seem to make it worth our while to examine with care the nature of the causal relation itself.

II

All readers of this book* will recall William James's description of the diverse "Worlds of Reality" in his larger *Psychology*,† and will remember that he refers in some detail to seven such worlds: The worlds (1) of sense, or of physical "things" as we instinctively apprehend them; (2) of science, or of physical things as the learned conceive them; (3) of ideal relations; (4) of "idols of the tribe"; (5) of the supernatural; (6) of individual opinion; (7) of madness. "Every object we think of," he tells us, "gets at last referred to one world or another of this or some other list." To the "worlds" in his list I would add the important "worlds"; (8) of immediate experience as introspectively recalled; and (9) of reflection upon this immediate introspective experience; as well as (10) the world of dreamland; and (11) the make-believe world of imaginative discourse.

In this manner of thought it is apparent that James was not dealing with the concept of reality, but rather with the appreciation of realness, or presentative stability, upon which this concept of reality is based; and for this reason I have suggested‡ that we gain a better idea of his meaning if we speak of diverse "realms of realness" instead of "worlds of reality" as he did; for the significance of the point he made lies in the fact that given mental items, or presentations, may be included in more than one of these realms, "the whole distinction of real and unreal," as he says,§ "the whole psychology of belief, disbelief, and doubt" being "grounded on two mental facts: first, that we are liable to think differently of the same" (mental items), "and secondly, that when we have done so, we can choose which way of thinking to adhere to and which to disregard."

* The remainder of this appendix, apart from a few changes, was published in the *Journal of Philosophy*, Aug. 29, 1912.

† Vol. II, pp. 291 *ff.*

‡ *Consciousness*, pp. 231 *ff.*

§ *Op. cit.*, p. 290.

In other words, these diverse realms of realness are in fact diverse noetic systems in which certain specific mental items appear, and are of such a nature that what we call "the same" mental items may appear in several systems; and may be real in one system while very unreal in another.

That these worlds are as diverse as James teaches is not always evident. To be sure, it becomes apparent that his statements are justified when, for instance, we compare the "world of dreamland," or the "world of imaginative make-believe," with the "world of sense" of every-day waking experience; or when we compare this latter world of every-day experience with what James called "the world of ideal relations, or abstract truth, believed or believable by all"; or again, when we compare this "world of sense" with that of "immediate experience as introspectively recalled," or with that of "reflection upon this immediate introspective experience." But it is not so evident that a significant diversity exists between the "world of sense, or of physical things as we instinctively apprehend them," and the "world of science, or of physical things as the learned conceive them." In fact, these two "worlds" do not seem to the average scientist to be separate worlds at all; and even when, led by such suggestions as that given by James, he begins to consider them as diverse, he is likely to think of the "world of science" merely as a purer form of the "world of sense."

That the diversity of these two worlds is thus overlooked is accounted for, as we shall presently see, by the fact that there is a very special bond between the two. Nevertheless, if we study their natures with care we soon become convinced that they are justly judged to be as diverse as any of the other worlds above referred to.

As James says, the whole distinction of real and unreal is grounded upon the fact that these diverse "worlds" exist; that what we call "the same" mental items may appear in two or more different "worlds"; and that these mental items may be very real in one "world" while very unreal in another. The ether which is very real in the "mechanistic world" of the physicist is quite unreal in the "world of sense," if judged by the canons of every-day experience. The rising of the sun is very real in the "world of sense," but very unreal in the astronomer's "world of science." Certain items, and the relations between them, appear fully real in our

"dreamland world," and in the "make-believe world" of the constructive imagination, which would be cast aside instantly as unreal in the world of every-day experience.

Such being the case, it seems clear that we cannot properly draw conclusions in one "world" from premises in a diverse world; nor employ concepts derived from data given in one "world" within a quite diverse "world," without logical danger.

When we witness a shadow pantomime we live for the time being in a "world" where real situations do not correspond with real situations in the "world of every-day experience," and we should not for a moment think ourselves warranted in concluding, because the shadow girl allows the shadow man to kiss her, that the physical-object girl would permit such a liberty. Or taking a more serious case, we may note how impossible it is to make proper conclusions in the "world of introspective observation" from premises in that division of the "world of ideal relations" which we may speak of as the "metaphysical world." In the latter, pain and error may be looked upon as unreal by the absolutist, while "the same" pain and error in the "world of introspective experience" cannot be held to be unreal. The error of the Christian Scientist lies in the fact that, half grasping the absolutist doctrine in the "metaphysical world," he jumps therefrom to conclusions in the "world of introspective experience."

Inasmuch as the concepts developed in any one "world" are based upon the appreciation of relations that are found real in that "world," I think it will be granted also that concepts which are developed in any one special "world" cannot be transferred to, and made applicable within, a diverse "world" without risk of confusion of thought. As I shall attempt to show in the sequel, we take just such a dangerous step when we attempt to apply the concept of causality to the relation between mind and body.

III

It seems to me clear, notwithstanding the views of eminent thinkers to which I refer below, that the concept of causality in common use arises primarily in connection with our naïve observation of natural phenomena; that it is, in other words, a concept belonging primarily to the "world of sense." One object strikes another that is stationary; the latter then moves; the former loses its motion in

whole or in part. The motion of the first object is thought of as bound up with, and the basis of, the motion of the second. The experience of an innumerable number of facts of this nature leads to the development of the concept of cause.

From the "world of sense" develops the "world of science" and within it the "world of mechanism"; and although this newly found "world" is, as we have seen, diverse from the "world of sense," nevertheless in it the same order of occurrences appears which originally yielded the concept of cause. And in this "world of mechanism" this causal concept becomes of very fundamental importance. In the "world of sense" attention is given to many other than causal relations, which latter are only occasionally noted. The "world of mechanism," on the other hand, excludes all forms of experience to which it is impossible to apply this causal concept, a fact which becomes more and more significant as the structure of science becomes more complex. The causal concept thus serves as a most powerful bond between the "world of sense" and the "world of mechanism," and the "world of science" in general; and its importance is thus greatly emphasized.

It is to be noted that, whether applied in the "world of sense" or in the "world of science," this causal concept arises in connection with what we call our objective view of experience.

When we turn to what we call the subjective view of experience, we enter, as we have seen, a "world" quite diverse from the "world of sense" and equally diverse from the "world of science"—enter, in other words, the "world of immediate experience as recalled," from which develops the "world of reflection upon this immediate experience."

In these new "worlds" we should naturally expect to note the development of certain concepts quite diverse from those developed in the "worlds" of sense and of science, and this expectation we find realized.

In the "world of reflection upon immediate experience," which we describe as the field of introspective observation, we discover volitional experiences which yield a concept which we may speak of as the concept of efficiency.

This efficiency concept is clearly not derived from data found in the "worlds" of sense or of science, within which appears the concept

of cause as above defined. Nevertheless, when we objectify the whole situation we note that the experience of efficiency often occurs together with motions of our bodies, which in turn move objects just as they are moved in the world of physical things. Hence this concept, which I here call efficiency, becomes closely bound up with the causal concept, and, as we shall presently see, is not uncommonly thought to be of its very essence—so much so, indeed, that the term causation is very frequently used as though it were identical with the term efficiency.

Using the term efficiency thus, and because of the observed relation above noted, we are led to make a false step, carrying the concept of efficiency, which properly belongs only to the world of introspective observation, over into the diverse world of physical objects, and conceiving of efficiency as part and parcel of causation in the physical world. Thus by a failure to keep clearly before us the diversity of the objective and subjective "worlds" we come to attach the term causality to the experience of efficiency, on the one hand; and, on the other hand, come to think of this experience of efficiency as of the very essence of the causal concept.

To take such a position as is thus outlined may seem somewhat audacious, when it is considered how many keen thinkers have upheld the doctrine that, but for the sense of efficiency correlated with successive movements, we should never have conceived of any such thing as a cause. Thus Dr. James Ward tells us* that "the source and primary meaning" of cause is found "unquestionably in ourselves as active and efficient."

Nevertheless I must be bold in the assertion that this view appears to me to be untenable; for if I read experience aright we are perfectly capable of entertaining the conception of cause in Nature without attaching to it any attribute of efficiency whatever. For instance, I do not find this sense of efficiency bound up with my notion of the causal relation between the activities within the sun and the conditions of motion upon the earth. It is only as we approach realms closely allied with those which are distinctly related to the direct activities of man himself that the sense of efficiency becomes bound up with the notion of cause by the process above referred to; and surely, if we examine the evidence critically, we

* *The Realm of Ends*, page 273.

find in our experience of Nature no evidence whatever of what we call efficiency when we speak in terms of immediate experience.

The distinction between these two concepts of cause and efficiency stands out more distinctly when we consider that the causal concept as derived from the observation of Nature, and quite apart from the concept of efficiency, depends for its existence, as Hume taught us, upon the appreciation of what, when clearly defined, appear, as J. S. Mill puts it, as "ideas of invariable, certain, and unconditional sequence."

On the other hand, so far as I can see, the concept of efficiency *in the world of introspective observation* is not resolvable into "ideas of invariable, certain, and unconditional sequence."

It is, of course, a matter of fact that we do in every-day conversation speak of mental states as the cause of physical states, and *vice versa*. But we must note that we all very commonly apply the concept of cause where we have no right whatever to do so. The average man is restive when he finds it difficult to account for any situation that baffles him, but at once rests satisfied if he can attribute it to anything that he can call a cause. It has been said that the inhabitants of the Bahama Islands believe the Gulf Stream does everything but milk their cows. The other day the laundress of one of my friends, having been spoken to sympathetically of the fog on a "washing day," remarked with satisfied complacency: "How can you expect anything else when everybody tries to dry their clothes on the same day?"

It is true that we should not apply the concept of cause to the relation of mind and body did we not find some measure of similarity between the experiences involved and the causal succession in Nature, and we may grant with Hume that so far as we apply the concept of causation to the relation of mind to body we do so as the result of judgments based upon the experience of successions. But this is quite apart from the point I would here make. What I am concerned to argue is that the concept of efficiency is derived from data given wholly in the mental field as immediately experienced; whereas the characteristics from which the concept of physical causation is developed are discovered in the "world of sense."

It is true, as Hume argued, that when we consider ourselves as active, as doing something, and think of our volitions as causes of

bodily movements, we are dealing with mere successions—successions which must be judged to be invariable and unconditional if we are to justify ourselves in speaking of the volitions as the causes of the bodily acts. But I submit that when we think thus of this "sense of doing something," we objectify the whole situation. We think of our "sense of doing something" as "out there," exactly as if it were the "sense of doing something" thought of as belonging to another man in the objective world, rather than within our own introspective experience. And we then carry over into this objectified mental field the causal concept derived from the "world of sense."

This is natural enough when one considers our reckless attribution of cause above referred to, and is a common procedure in the careless life of the average man, and of the philosopher when he lays aside the attitude of the thinker and becomes an average man. The trouble arises, however, when the philosopher, as a thinker, assumes that he is justified, not only in carrying over the causal concept derived from the "world of sense" into this objectified mental field, but also in carrying it over into the non-objectified field of immediate experience. It is one thing to apply the term cause where we note mere physical-mental or mental-physical sequences, following the habit of the common man who thoughtlessly applies the causal relation whenever he notes sequences. It is quite another thing to show the warrant for this application of the causal concept, if we agree that it can only properly be applied when sequences are recognized to be "invariable, certain, and unconditional."

If the position thus taken is warranted, then clearly, when we ask whether the mind can act causally upon body, or body act causally upon mind, we must use care in distinguishing the diverse meanings attributed to the word causation.

Activities of body when considered *quite objectively*, as may be done in our study of the behavior of animals without any assumption of consciousness due to our observation of the analogy between them and ourselves, appear as part of the mechanistic system, within the "world of science." Here causation, in the sense of invariable unconditional succession, may be held to apply. But the concept of efficiency does not at all clearly apply; for, if we strictly maintain the objective attitude we have no evidence whatever of the existence of mind in connection with this objective study of behavior.

When, on the other hand, we consider changes in consciousness as such, we find that the concept of efficiency does apply, while the concept of causation in the sense of unconditional invariableness of succession does not at all evidently apply.

It must be constantly borne in mind also that when we consider this question we are not dwelling within the "world of physical objects" which gives us the conception of causality as invariable unconditional sequence, nor within the "world of introspective experience" which gives us the concept of efficiency, but in a realm of realness quite diverse from each of them; for it covers both of these separate "worlds" conceived of as related with one another. Thus, in applying the concept of causality to the mental and physical items in this new "world," we are attempting to carry over into it a concept derived from the one or the other of the diverse worlds first mentioned. The question is whether we have any right to take this step—a question which cannot fail to be raised if one bears in mind the radical difference above noted between the meaning attributed to causation in the realm of body and in the realm of mind.

IV

In taking up the consideration of this question we must note in the first place that it is necessary to avoid the obvious error made by the average man, who is wont to think that the mind sometimes acts causally upon the body and that sometimes the body acts causally upon the mind. We seem bound to reject any such haphazard and dubious relation, and to ask two questions: viz., first, whether we are warranted in holding that the mind always or sometimes acts causally upon the body, and, secondly, whether the body always or sometimes acts causally upon the mind. And we are also called upon to consider each of these questions in relation with the two concepts above considered, viz., that of causation proper derived from our objective observation of the world of objects, and that of efficiency derived from our reflection upon introspective experience which is held by many to be of the essence of the causal concept.

Let us take up first the concept of causation as it is thought of by those who hold that it is derived from our experience of efficiency.

If under this view we hold that a bodily state is in any case the cause of a mental change, we are compelled to assume in physical nature the existence of an efficiency of which we have no direct evidence.

If, on the other hand, we hold in any case that a mental state causes a bodily act, we hold that the bodily act was due to the efficiency component of the mental state. It is difficult, however, to bring such a tenet into harmony with the phenomena of habit, where we note that acts which are at first preceded by mental states which involve this sense of efficiency, if repeated, soon follow the occurrence of mental states which do not involve this sense of efficiency, and are finally performed without the occurrence of any recognizable, antecedent, correlated mental states whatever.

If now we take the term causation in the sense applicable to our observations of the external world, we can apply it to the relation between mind and body only by showing that we have reason to believe that certain special mental changes follow invariably and unconditionally certain special physical changes; or that certain special physical changes follow invariably and unconditionally certain special mental changes.

We do note certain mental changes which in repeated instances appear to follow certain changes of bodily activities; but we surely are not warranted in saying that these sequences are invariable and unconditional. The cutting of superficial nerves is often in our experience followed by a marked painful sensation; but that this succession is not invariable or unconditional appears clear when we note that the soldier in the heat of battle often fails to appreciate the fact that he has received a superficial wound; this being an example of the influence of what we call a change of "threshold" of awareness.

In like manner we do note certain bodily changes which in repeated instances appear to follow certain mental changes, but we surely are not warranted in saying that these sequences are invariable and unconditional. Grief is so often followed by ill-health that we carelessly speak of the former as the cause of the latter, but the sequence is really not invariable or unconditional. Volitional experience does not always prevail to overthrow, or even to modify, habitual activities.

Surely, then, whether we hold that mind acts on body, or body on mind, we are bound to agree that it is impossible to hold that the succession of changes is unconditional even where it appears to be invariable. Under such conditions, in the "world of sense," and, its development the "world of science," from which the commonly employed concept of causation seems to me to be derived, we are led, not to the attribution of a direct causal relation between the two successive phenomena, but to the postulation of a causal influence beyond both; as the invariability of the sequence of night and day are appreciated to be conditioned by something in nature extrinsic to them. We may in the end find ourselves compelled to postulate some cause as the determinant of the observed relation of correspondence between mental and physical changes, but this does not imply that we are forced to apply the causal concept to the mental-physical relation itself.

V

Assuming that the validity of the application of the concept of causality to the relation between mind and body is open to grave question; nevertheless, as it is in fact thus applied by the average man, we should not be surprised, after what has been said above, to find that he comes to look upon this causal relation as a thoroughly haphazard and lawless one, although we may well wonder that thinkers do not protest against such inconsistency. Few of us indeed can claim to be free from such a charge. We are usually quite content to say that sometimes the mind acts upon the body and sometimes it does not; and, on the other hand, that sometimes the body acts upon the mind and sometimes it does not. We say, for instance, that indigestion, which is a physical state, gives my friend "the blues," which is a mental state; but we do not seem to think that any physical state causes such a mental state as an act of will. We say that a noise, which is a mental state, makes our friend jump, the jumping being clearly a change of physical state; but we do not seem to think that any antecedent mental state causes the winking of his eyelids, or the throbbing of his heart, which are also physical states.

But this difficulty disappears altogether if we look away from this causal relation and concentrate our attention upon the *corre-*

spondence between mental and bodily changes; for then we find much evidence that there is a thoroughgoing correspondence between successions of neururgic and noetic changes which enables us to account for the relation of mind and body in a manner freed from the acceptance of haphazardness and lawlessness.

Under such a view certain changes in the nature of the activities within the nervous system are held to be coincident with the appearance of certain specific mental items. There thus appears to be a correspondence between neururgic and noetic forms, and evidence of the breadth of this correspondence increases as our knowledge of nerve activity increases.*

Now what we have to deal with in connection with this theory is merely corresponding successions in both the neururgic and the noetic series, and, if we approach our problem from this standpoint, we find the interpretation of the facts concerning the relation of mind to body, which are usually made in terms of causation, thoroughly well interpretable without any such use of this causal concept, provided we accept the view that there is a psychic field of non-awareness, a view in favor of which we have much cogent evidence.

In closing, then, let us consider a few cases to illustrate how the apparent haphazardness and lawlessness of the relation between mind and body disappear if we interpret this relation in terms of correspondence rather than in terms of causation.

If I were to walk up behind a man and discharge a pistol close to his ear he would jump aside suddenly and would be likely to describe the occurrence by saying "the noise made me jump." The noise is a psychic state, while the jump is due to certain active muscular states occasioned by changes in the nervous system. His description, therefore, implies that the psychic state (the noise) in some mysterious way caused the physical change (the jump).

But if we consider the case merely as an instance of co-ordinate successive occurrence the mystery seems at once to disappear. The psychic change, which we call the noise, was accompanied by a

* This I call the theory of neururgic and noetic correspondence to differentiate it from the theory of parallelism which was devised by the atomistic psychologists, and which fails in many directions. The theory of correspondence, however, so far as I can see, meets these difficulties in assuming that changes in a psychic *system* correspond with changes in the physical *system* as differentiated in the nerve system.

change of nerve condition, and in like manner the jump, which was due to certain nerve activities, was accompanied by certain "instinct-feelings" quite within the mental order. What happened may therefore be formulated as follows:

Mental series.....(*A*) Noise,
followed by (*B*) "instinct-feeling" (overlooked).
Corresponding physical series....(*X*) Nerve change (overlooked),
followed by (*Y*) jump.

In his description of this occurrence the average man overlooks the nerve change *X* and also the instinct-feeling *B*, so that he thinks of the jump as due to the noise rather than to the overlooked nerve change *X*. When the situation is stated in the terms above used this occurrence surely seems quite natural and not especially involved in mystery.

Or let us take another commonplace case. The ordinary man is likely to say of one of his friends: "His deep grief (mental state) made him ill (nerve situation)."

If the occurrence thus described is formulated as above we have:

Mental series.....(*A*) Grief,
followed by (*B*) a mental state (overlooked).
Corresponding physical series....(*X*) Nerve situation (overlooked),
followed by (*Y*) illness.

In his description of this occurrence the ordinary man overlooks the nerve change *X* and also the psychic change *B*, so that he thinks of the illness as due to the grief rather than to the depressed nerve condition accompanying this grief.

So again you may hear some one say: "My act of will (mental state) made my arm move (physical state)." But if we state this in terms of a similar formulation we have:

Mental series.....(*A*) Will-act,
followed by (*B*) a mental state (overlooked).
Corresponding physical series....(*X*) Nerve change (overlooked),
followed by (*Y*) arm movement.

In the ordinary description of this occurrence the nerve change (*X*) corresponding with the will-act (*A*) is overlooked, as is also the psychic change (*B*) corresponding with the arm movement (*Y*); so that the arm movement is thought of as due to the appreciated will-act rather than to the nerve condition that accompanied this will-act.

The commonplace statement about willing to move one's arm is closely allied with similar remarks made by a very large number of people in these days whom you are accustomed to hear say, "I willed to be cured and I am now well"; or in other words, "my will-act (mental) gave me good health (physical)."

If this is formulated as above, it reads as follows:

Mental series.....(*A*) Will-act,
followed by (*B*) mental conditions (overlooked).
Corresponding physical series....(*X*) Nerve changes (overlooked),
followed by (*Y*) good health.

In the ordinary description of this occurrence the nerve change (*X*) corresponding with the will-act (*A*), and also the mental state (*B*) corresponding with good health (*Y*), are overlooked, so that the restored health is thought of as due to the will-act rather than to the resultants of the nerve changes corresponding with this will-act.

The same people who tell us that they regain their health by will power are likely to say: "By an act of will I can make pain disappear." If the occurrences upon which they base such a broad statement are formulated as above, we have:

Mental series.....(*A*) Will-act,
followed by (*B*) loss of pain.
Corresponding physical series....(*X*) Nerve change (overlooked),
followed by (*Y*) nerve change (overlooked).

Here the nerve changes that accompany both the act of will and the loss of pain are overlooked, so that the person who speaks thus is *aware of* merely (*A*) the will-act (mental) followed by (*B*) loss of pain (mental).

It is true that in some cases the will-act is followed by disappearance of pain, which merely means that the nerve situation accompanying a particular will-act is followed by special nerve conditions whose psychic correspondents involve no pain. We have, however, no evidence to warrant us in holding that the sequence is invariable and unconditional, and that therefore the causal concept of science is applicable. In other words, we have no adequate evidence to warrant us in holding that the nerve state accompanying the will-act is in all cases followed by the healthy physical state which carries with it this loss of pain. That is to say, the experience above described gives us no ground for the belief that if a man has sufficient "will power" he can always remove the unhealthy conditions which yield pain.

APPENDIX II

OF OUTER-WORLD OBJECTS

Throughout this work I have accepted the common-sense distinction between the outer world and its objects, and consciousness, in this basing our studies upon the dualistic conception which obtains in our every-day life, and which has been adequate for our purpose. The fundamental cravings of the human mind for a simplification of experience by the subsumption of diverse concepts under some one other and broader concept, leads us to search for some conception which will enable us to look upon these dualistic categories as diverse aspects or forms of a unity. Those who are called materialists have aimed to find this unity in the category of outer-world objects. Their opponents have aimed to discover it in consciousness. I would here call attention to certain points which seem to support the latter of these views.

In Chapter I, I have called attention to the well-recognized fact that, if some special characteristic x is frequently noted as inherent in a frequently observed experience A; then where there is given a less frequently observed experience B in which this characteristic x also inheres, the remainder of the more frequently observed experience A tends to be revived as an image, and this image becomes part and parcel of the total of the less frequently observed experience B. And I there noted that in such cases we tend to interpret

the less frequently observed experience *B* in terms of the more frequently observed experience *A*. If we perceive a round, properly shaded, piece of yellow paper, we are likely to say: "What a clever representation of an orange." Were round, shaded pieces of yellow paper more common in our experience than oranges, we should say, when we observed an orange: "How much it looks like a round, shaded piece of yellow paper." I shall not repeat the suggestion there made in regard to our assumption that other men have minds like our own. I would ask the reader rather to note that the above-mentioned psychological fact may be stated in another way, and to consider certain implications resulting from this observation.

If a characteristic *A* of a given experience is, *after many repetitions*, given in connection with a *new* experiential characteristic *B;* any subsequent repetition of the newer characteristic *B* will tend to carry with it a very marked revival of the often repeated characteristic *A*. Thus it is that the sight of a round, shaded piece of yellow paper reminds us instantly of an orange, while the sight of an orange does not commonly remind us of a round, shaded piece of yellow paper.

I presume it may be assumed that the human babe, at the moment immediately following its birth, is a conscious being. Its consciousness may be exceedingly vague and chaotic, but it will be generally agreed, I imagine, that it is sufficiently developed to involve a differentiation of characteristics. Were it not, we should not find ourselves attributing to it the ability to discern the difference between sight and hearing which is indicated by the differences of its behavior upon being stimulated by light and by sound respectively.

If we agree that the child at birth is a conscious being of this type, we can scarcely fail to agree that it was a similarly constituted conscious being some hours before birth, and indeed during some months before birth, to look no further back.* Hence it seems clear that the capacity to differentiate characteristics within consciousness, which is so distinctly evidenced immediately after birth, must have existed during these prenatal months.

This differentiation must, doubtless, have yielded the beginnings of the mental characteristic which we ourselves know as the sense of movement, for it is a well-known fact that the babe in the womb

* *Cf.* my *Consciousness*, pp. 166 *ff.*

is more or less active for some time before birth. And beyond that this differentiation must have yielded the beginnings of the characteristic which we ourselves know more definitely as the sense of resisted movement; for the mother knows that the babe struggles against the walls of her womb. Thus the child at birth will be possessed of a rudimentary differentiation of its consciousness x corresponding with the obstruction of its movements, which, be it noted, has been often experienced. To this characteristic x we may give a name; let us call it the "otherness" characteristic.

The movements of the child immediately after birth, as it is held in the hands of mother or nurse, must yield an experience of this "otherness" characteristic, which has been so repeatedly experienced during its prenatal life. But presently when it opens its eyes, it experiences a quite new characteristic in rudimentary sight. Its very early life will soon lead to a conjunction of this new sight characteristic with the often prenatally repeated rudimentary sense of movement characteristic, and presently a conjunction with the as often prenatally repeated "otherness" characteristic, which latter will be given anew when its movements after birth are obstructed by what we call outer-world objects. Hence will arise a new differentiation y, which we may call the "out-thereness" characteristic.

As the "otherness" characteristic has been very frequently experienced, while the sight characteristic has not, the occurrence of the latter will tend to arouse the revival of the former; and the conjunction of the two differentiations will yield the "out-thereness" characteristic. Thus it will soon come about that each experience of the sight characteristic of a certain definite type will at once result in the reinstatement in marked form of the revival of the "out-thereness" characteristic. In other words, the babe's sight characteristic of a certain type will immediately suggest the possible existence of the "out-thereness" characteristic as it would be if actually experienced. And it will soon discover by its movements that this imaged "out-thereness" is very frequently displaced by actually realized "out-thereness," as it finds its movements restricted in relation to what it sees.

As the result of this, whenever the babe gains a sight experience of the nature referred to it will immediately picture, as an expectation, the possible realization of the "out-thereness" characteristic;

and this expectation will be so frequently realized that the babe will soon come to assume a possible "out-thereness" experience whenever it notes the special sight experience under consideration, even though this "out-thereness" characteristic is not in fact realized. Hence it will soon happen that, whenever the special sight characteristic referred to is given, the child will assume the possible existence of the "out-thereness" characteristic even when it cannot possibly be realized. And this assumption will tend to become habitual because its validity will be attested by innumerable experiments.

In the interest of simplicity I avoid all reference to the fixation of this assumption by the correlation of the movement with senses other than that of sight.

When once the assumption under consideration is firmly established, it is not difficult to picture to ourselves the process by which we construct a somewhat that is the ground of this actual or possible "out-thereness" experience; by which, in other words, we construct on its basis the concept of outer-world objects, and of the outer-world as a whole. What I wish to emphasize is this: that we seem to find in the very nature of consciousness itself the ground for the development of this conception of outer-world objects. And it is to be noted that this conception is itself a mental construct quite within conscious experience.

This conceptual assumption, verified as it is by countless experiments, is perhaps the most thoroughly validated of all the assumptions made by the conscious man; and I for one am content to believe that we are fully warranted in holding that the entities thus assumed do really exist. I am concerned here merely to support the view that this belief in outer-world objects is based upon an assumption pure and simple; that the existence of such outer-world objects is purely hypothetical, although the hypothesis involved is as thoroughly verified as any hypothesis ever can be; and that this assumption, and the hypothesis based upon it, are data of our conscious experience based upon a fundamental characteristic of consciousness. This position is strengthened if we view the subject from a slightly different angle.

When one awakens of a morning all that exists for one is a succession of what we, when sophisticated, call "objects-in-the-outer-world"; bath-wrapper, bath-tub, towel, water-in-tub, let us say.

But presently we find in experience water, and then hot; the former of which is an object-in-the-outer-world, the latter appearing to be of a quite distinct nature, and not an object-in-the-outer-world. We describe it as part of consciousness.

Analysis indicates that this distinction is bound up with the fact that the water experience has, and that the hot experience has not, a special characteristic. This characteristic we may call "out-thereness." It is because we have many experiences of this nature that we are led to distinguish between the outer world and consciousness.

Further analysis indicates that this "out-thereness" quality within experience, in itself, belongs to the grouping which we call consciousness. It certainly does not belong to that grouping which we call the outer world.

If we agree that this is correct, it becomes interesting to note that by adding this psychic quality "out-thereness" to some special item in consciousness to which it is not originally attached, we at once transform this item into an object-in-the-outer-world. A cry of distress out of the mist, carrying with it the psychic quality of "out-thereness," at once transforms what I had just thought to be a mere illusion—a purely mental thing—into a real man in the outer world.

On the other hand, we at times find in experience objects-in-the-outer-world from which we are able to remove the psychic quality of "out-thereness"; and then we find that the object-in-the-outer-world disappears as such, and forthwith the experience becomes what appears to be merely an item in consciousness. The drunkard sees real snakes; but, if he is not too far gone, we may convince him that he has experienced only a mental state which we call an hallucination. We thus by reasoning, which is a purely mental process, remove the "out-thereness" quality, which is a mental quality, and *instanter* his object-in-the-outer-world becomes an experience wholly within what he calls his consciousness.

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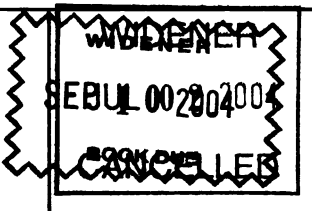

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